

**A COMPARATIVE STUDY OF ENGLISH AND EGYPTIAN WORD
ASSOCIATIONS AND THEIR IMPLICATIONS FOR THE
TEACHING OF ENGLISH TO EGYPTIAN LEARNERS**

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ABSTRACT

Revival of interest in word associations has taken a new shape. It has been realized that word associations can be a reliable technique for the comparative study of cultures. Word associations can explore the contents of human minds without being expressed in the full discursive structure of language. They are capable of yielding significant information about the attitudes, beliefs, and cognitive structures of cultures.

This information may be of considerable pedagogic importance in foreign-language teaching. A foreign language should be taught in its native cultural context. Hence, foreign learners have to learn about this cultural context. Word associations can help the FL teacher in this respect through introducing, to the learners, this information about the attitudes, beliefs, and cognitive structure of the culture of the target language.

A comparative study of English and Egyptian word associations has been carried out and the pedagogic implications for the teaching of English to Egyptian learners have been discussed.

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INTRODUCTION

Interest in the phenomenon of association has an old history. The fact that people associatively cluster word stimuli with the same word responses has preoccupied scholars since Plato. This interest has recently taken a new shape. It has been recognized that word associations may be a reliable technique for the objective and comparative study of different cultures.

Word associations can predict those repetitive patterns which could be interpreted as significant and systematizable patterns of the culture and linguistic behaviour of a certain people. These patterns, in turn, reflect the people's world view and how they categorize experience.

From the communicative point of view, these patterns may be of great significance in foreign-language teaching. A foreign-language should be taught in its cultural context. It follows, then, that foreign learners have to learn about that cultural context of the target language. Word associations can help the FL teacher in this respect through introducing, to the learners, those sociolinguistic patterns of the foreign-language culture.

To put this argument into application, a comparative study of English and Egyptian word associations has been carried out and the pedagogic implications and implementations of this study have been discussed.

In Chapter I the history of associationism has been reviewed in order to see how the concept of associationism has developed through different schools of thought, how the Word Association Test (WAT) is constructed, how associations are analysed and what variables affect the production of associations. The diachronic and cross-cultural studies of word associations are also discussed.

Chapter II deals with the pedagogic value of word associations. How, for example, they can be a reliable technique for vocabulary selection. The pedagogic implications of the capability of word associations of probing the subjective meaning of a culture, as well as the relationship of word associations to the notions of "communicative competence" and "Native Speaker Insight" are tackled.

The construction of the word association test for the comparative study of the English and Egyptian cultures is discussed in detail in Chapter III. The current background of the teaching of English and its objectives in Egypt is also discussed in order to know to what extent our approach conforms to the objectives of teaching English on the one hand, and to what extent these objectives meet the current needs of the Egyptian learners, on the other.

Our interest is not in associations as linguistic entities but rather in the concepts they symbolize and in the interrelationships among these concepts. From a comparative point of view, we have to account for the

differences in word associations between different cultures. Are these differences the products of differences in the linguistic structures of the languages involved? Are they the products of differences in thought processes? Are they the products of differences in socialization and social life? Or, are they the products of the inter-relationships of all these variables? To answer these questions we have to look, firstly, at the anthropological aspect of associations, namely, the nature of language, culture and thought and the relationship between them. This has been attempted in detail in Chapter IV. Secondly, we have to look at the developmental aspect of associations, namely, how these variables form and develop since the individual's birth. How is language acquired and developed? What variables are involved in language acquisition? How can word associations be accounted for in terms of language development? These questions are discussed in Chapter V. We have also to find out: How does cognition develop? Is there any relationship between linguistic and cognitive development? Does it make any difference to grow up cognitively in one culture and not in another? How can word associations be accounted for developmentally from the cognitive point of view? Chapter VI tackles these questions.

The discussion of both anthropological and developmental aspects of associations has led to a multi-dimensional approach to the analysis of Egyptian and English

word associations. Word associations have a complex underlying structure and organization that cannot be accounted for only from one perspective. A multidimensional approach: linguistic, cognitive and cultural, is suggested. This is dealt with in Chapter VII. Also the pedagogic implications of the comparative analysis of associations and their implementation with reference to Egyptian learners of English are discussed.

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CHAPTER I

WORD ASSOCIATION: A GENERAL REVIEW

1.1 History of Associationism

1.1.1 Associationism in Greek Philosophy

The notion of 'associationism' is actually as old as the speculation about mind. It can be traced back to Greek philosophy. It simply means that ideas, images, and thoughts are related in such a way that the occurrence of one brings to mind another one 'associated' with it.

Although Plato made some comments that had some relevance to association, it was Aristotle that gave the fullest description of association (Warren: 1921). According to Aristotle (Hörmann 1971: 111) association of ideas occur as a function of either of two variables:

1. The quality of ideas: One idea is associated with others which are either similar or stand in contrast to it. For instance, the word 'big' would be associated with 'large' as well as with 'small'.

2. Past experience: What is experienced as simultaneous or successive is associated. If ideas A and B were experienced simultaneously or in close succession, idea A will, when it occurs in future tend to call to

consciousness idea B. (This is called 'forward association'; also 'immediate' or 'adjacent'.) On the other hand, when idea B occurs in future, it may call idea A. (This is called 'backward association'.)

From this we can infer the mechanisms according to which Aristotle explains the process of association, i.e. similarity, contrast and contiguity (in time or space). Those three mechanisms are conventionally known as the 'Classical Laws of Association'.

Another important inference is that the origin of associations does not exist in the inherent characteristics of the associated elements (to use a neutral term), but in external verifiable events. This view is, in fact, behind the viability of 'associationism' as a field of study till the present day.

1.1.2 British School of Associationism

In the eighteenth century, the rebirth of interest in the phenomenon of association resulted in the so-called 'British School of Associationism' (or Empiricism). Though the philosophers of this school differed in some details on association, they believed in the basic doctrine that mind is formed through a lawful process of the associations of experiences and ideas. They conceived of association as the basic mechanism of the mind and many attempts were made to explain even the most complex processes of thinking. That is why associationism in this

school is a theory of thought.

While the philosophers of the school agreed on the classical primary laws, they differed markedly on the 'secondary laws'.

The primary laws describe the conditions that are necessary for the formation of associations (contiguity, similarity and contrast); whereas the secondary laws describe the conditions that modify the strength of the resulting association (Deese, 1965: 7).

It was T. Brown who gave the most detailed account of the secondary laws. He formulated the following nine laws (Warren, 1921): 1. Duration, 2. liveliness (or vividness), 3. frequency, 4. recency, 5. freedom from competing associations, 6. constitutional differences between individuals, 7. emotional variations in the same individual, 8. temporary states of health, etc., and 9. prior habits of life and thought.

On the other hand, the British empiricists agreed on two principal things: that the most important primary law was that of 'contiguity' and that 'frequency' was the most important of the secondary laws.

1.1.3 Invention and Development of the Word Association Test (WAT)

Towards the end of the nineteenth century, the empirical study of association was taken up by Galton (in 1880), Wundt (in 1883) and Ebbinghaus (in 1886).

Galton invented something similar to the modern free-association test. He simply wrote seventy-five words on slips of paper, put these away for a few days, then picking one of them without looking at it, put it under a book in such a way that by leaning over he could read what was written on it. As soon as he saw the word, he started a 'chronograph' and stopped it again the moment two ideas in connection with this word had come to his mind (Hörmann, 1971: 112).

Then Galton classified the ideas as follows (Woodworth, 1938):

Visual and other images of past scenes or events	32.5%
Histrionic representations	22.5%
Purely verbal: names, phrases, quotations	45%

It is worth noting that Galton introduced three measures of treating associative data quantitatively and which have been used since then:

- (1) The associative reaction time;
 - (2) The frequency of repetition of the same associative response;
- and (3) A classification of the responses with a count of the number falling in each class.

Galton's technique was taken up by Thrautscholdt (in 1883) in the first psychological laboratory set up by Wundt at Leipzig in 1879 (Woodworth and Schlosberg, 1954). Thrautscholdt introduced the technical improvement of providing an experimenter (E) to announce the stimulus

words and take the reaction time (RT): the time that elapses between the exposure or announcement of the word and the occurrence of the response. In 1886 Cattell designed a voice key so as to obtain a chronoscope reading of the RT, the subjects' responses being spoken into the voice key. In 1889 Cattell and Bryant simplified the setup by using a list of stimulus words exposed visually. And even the instructions to the subjects remained identical over the decades: "I am going to read to you (or in visual presentation: "I am going to show to you ...") a list of words. After each word please answer with the first word that comes to your mind."

The experiments of this group were concerned with the previously formed associations that have been established in the subject's past experience and not with the formation of new associations. They did not explain how these associations were formed. They just accounted for them in terms of the classical laws of contiguity and frequency.

To solve this problem Ebbinghaus (in 1885) argued that words and connected discourse already contained too many associations. His idea was to begin with 'new material' which had no previous association. Thus, he invented the 'nonsense syllable' which is a three-letter sequence, usually containing a vowel between two consonants, which (he argued) has no inherent associations. (It was realized later (Glaze, 1928) that

nonsense syllables are not free from associations. For example, the syllable "FUL" is by definition nonsense in the sense that it cannot be found in an English dictionary. But nearly all subjects immediately think of the meaningful word 'FULL'.)

Hence we can see that the British Associationists depended heavily on introspection. They analyzed their own experiences, their own thinking processes and attempted to recall or discover the possible factors, past or present, responsible for the occurrence of ideas.

1.1.4 Associationism in Behaviourism

The objective study of 'association' has been undertaken and developed by the experimental behaviourist psychologists. These psychologists have believed that 'associationism' is viable in the laboratory of experimental psychology. This viability of association is due to, as has been mentioned above, the fact that the association theory allows no structure to be determined by the internal properties of mind. The structure is determined by events which are external to the mind. It is this main characteristic that has given associationism its present position in experimental psychology. The notion of 'external' events means that they can be controlled and studied experimentally. To use the modern psychological terms, these 'external' events represent

the 'input' to the mind or the 'stimuli' to the subject (S). Hence, the 'output' which the subject produces represents the 'responses' to the 'stimuli'. This, in fact, reflects the behaviourists' attitude that they are concerned only with the observable, verifiable, and overt behaviour. But in recent years they have tried to deal with the internal, covert processes in the mind through the notion of 'mediation'.

Furthermore, the classical laws of association have been helpful to behaviourists in shaping their laboratory experiments. The importance of the unit of repetition (the trial) lies in the fact that it allows both contiguity and frequency to go together. Repeated presentation (of the material) is a device for allowing a number of processes to go on successively; a carefully controlled device for permitting a fixed number of contiguities to take place (Deese, 1965).

On the other hand behaviourists have coined the phenomenon of association in their terminology. As has been mentioned, association between two elements results from an earlier experience of co-occurrence of the two elements. To use the terminology of behaviourism: the association experiment studies a stimulus-response bond or habit (St-R) by presenting to the S a stimulus and registering the response. That a particular response is associated with a particular stimulus is considered the result of an earlier "reinforcement" which "strengthened" the association bond or habit between the stimulus and response.

This in fact, is the core of what may be called 'behaviourist associationism'. There are certain 'associative learning theories' which reduce all learning to a simple associative rule: "Any combination or totality of stimuli which has accompanied a movement will be followed by that movement when the combination occurs again." (Jenkins, 1969).

That is why association theory in the behaviourist tradition is a theory of behaviour.

1.1.5 WAT and Verbal Learning and Behaviour

The foregoing discussion reflects the great interest in the Word Association Test (WAT) as an important device in the study of the psychology of verbal learning and verbal behaviour. In general, the WAT is used in two different ways (Gramer, 1968):

(i) For some psychologists, the study of natural language associative habits is the first step in the study of other cognitive processes. They believe that the associative bonds among words are important and meaningful factors in determining these processes. Therefore their interest in word association is in providing experimental material so that associative strength may be used as an independent variable. Thus, knowledge about word association is only a preliminary phase in developing some further study such as: recall, transfer and concept formation.

(ii) For other psychologists, the interest is in the associations themselves. They believe that associations reflect something basic about the nature of the mind and its thought processes; that associative processes are among the basic mechanisms of thought, and that to understand associative processes it is necessary to understand the constituent associations of which they are formulated. Thus, association is considered as a dependent variable to be explained as a function of the other factors.

1.2 Description of Word Association Test

In a word association test the subject is given stimulus words and is asked to respond with the first word that comes to his mind as a response for each stimulus word.

The stimulus words may be presented one by one in an exposure device, they may be spoken by the E, or they may be read silently by the subject from a written list. The E may record the response by means of writing it down or by means of a tape recorder. He also may record the reaction time (or the latency of association). RT may be recorded by the use of a stopwatch.

Generally, the bulk of available data has been obtained by having Ss write their responses alongside each stimulus word. The use of a written WAT enables large

amounts of data to be collected in a short period because it can be used with a large number of Ss at one time. In such a case the RT cannot be easily obtained.

The analysis of WAT has three identifiable stages (Clark, 1972):

- (1) the respondent must understand the stimulus,
- (2) he must operate on the meaning of the stimulus,
- and (3) he must produce a response.

It is the unique second stage that clearly sets this test apart from normal language mechanisms. It contains an associating mechanism which through its associating laws, fixes the response at the third stage.

1.3 Types of Word Association Test

WAT has, generally, the following types (Cofer, 1972):

1.3.1 Single (discrete)-response free association (SRFA)

This type involves presenting a stimulus word to the S and asking him to respond by the first single word that comes to his mind. Associative responses obtained by this type are considered 'free' in the sense that any response is accepted as long as it is not a repetition of the stimulus word. In other words, no restrictions are placed on the response that may be given.

1.3.2 Multiple-response free association (MRFA)

This type involves presenting a stimulus word and asking the S to respond with more than one response. It has two variants:

a) Continuous Association:

The subject is asked to respond to the stimulus word by giving as many responses as he can within a definite interval of time. In doing so, it is argued that S may be responding to the original stimulus or he may be responding to the responses he has already given.

b) Continued Association (Noble, 1952):

To prevent the S from responding to the responses he has already given, each stimulus is repeated a number of times, so that each of the subject's responses is more likely to have occurred to the original stimulus than to responses he has already made. S is also required to give as many responses as he can within a definite interval of time.

1.3.3 Single-response controlled association (SRCA)

This differs from SRFA in one respect, i.e. the S is instructed to give responses of some specified type. For example, antonyms or synonyms in response to the stimulus word. Thus, the restrictions are placed on what responses can be given in carrying out the task.

1.3.4 Multiple-response controlled association (MRCA)

Again this type requires the S to respond with more than one response. Restrictions are also placed on the type of responses to be given. Also, it has the two variants: continuous and continued.

1.4 Standard WATs

It is necessary here, before going further, to mention two WATs which are considered to be pioneering in the field:

1.4.1 Thumb and Marbe Test

In 1901 Thumb and Marbe began the first experiment to show that the responses in WAT are systematic and not haphazard. Sixty words, one after another, were called out to the subjects; the list was made up of ten terms of family relations (father, mother ...), ten adjectives (big, small ...), ten pronouns (I, you ...), ten adverbials of place (in front of, where ...), ten adverbials of time (when, now ...) and the numerals one to ten - all these in random order (Hörmann, 1971).

The responses of the Ss were recorded as well as RT. Generally it was found that terms of family relations led to answers with terms of family relations; a particular stimulus word would lead to a particular

response. In the cases investigated by Marbe the reaction to 'brother' was always 'sister', to 'son' generally 'father', rarely 'daughter' and never 'brother' or 'uncle'. Briefly, the associations called out by a stimulus word do not consist of any words, but they fall into distinct classes.

Marbe investigated the RT between St and R. He found a certain systematic correlation between RT and the frequency of occurrence of associations. The more frequently elicited associations occur more rapidly than the less frequent ones. This is now known as Marbe's Law.

1.4.2 The Kent-Rosanoff Test (1910) (Woodworth and Scholsberg, 1954)

In the hope of providing a basis for the use of free associations in discovering individual peculiarities, Kent and Rosanoff selected a list of 100 familiar English nouns and adjectives, though a few could be taken as verbs, and gave them orally to each of 1,000 normal subjects, mostly adult men and women of varying education and occupation. The S was seated with his back to E and requested to respond to each stimulus word with the first word that occurred to his mind other than St word. Assembling the results from the Ss, the authors prepared a table of all the responses

to each stimulus word, with the frequency of each response. Three ways have been used for obtaining the individual's score:

- a) Simply count the number of 'individual reactions', defined as reactions having a frequency of zero in the tables.
- b) Count the number of high frequency responses given by the individual.
- c) The most comprehensive measure would seem to be the median frequency value of the individual's responses. This measure shows with how large a fraction of the population the individual's free associations tend to agree on the whole. If the median value is high, the individual runs to common responses, if low, he runs to unusual responses.

1.5 Analysis of Associative Responses

Having obtained the responses produced by Ss in WAT, the associative responses are usually treated in two ways:

1.5.1 Production measures

They aim at determining the number of responses the stimulus elicits in response to it in a continuous or a continued WAT. It is sufficient to compare stimuli

in terms of the number of responses they elicit or the number of Ss who reported an association to each stimulus. They are not concerned with what associations occurred or with the characteristics of their distributions. Since the production measures are mainly concerned with continuous and continued associations on one hand, and with nonsense syllables on the other, they are not dealt with in detail.

Two measures have to be mentioned in this respect:

(i) The association value (av): Glaze (1928) studied the (av) of nonsense syllables. Association value for each nonsense syllable was simply the proportion of the Ss who indicated that a syllable meant something that could be verbalized or not. For example, none of the Ss found meaning for the syllable JYC (Y was considered a vowel), and all the Ss found meaning for WIS. This means that JYC has zero per cent association value, whereas WIS has 100 per cent av.

(ii) Meaningfulness (m): This was introduced by Noble (1952) in a continued WAT. It simply means the average number of responses given to each stimulus in one minute.

1.5.2 Relational measures

They are mainly used to describe the associations obtained to stimuli and the characteristics of their

distribution and the interrelations among these associations. Thus in the description of the associative responses, we must give an account of distribution of associations, classification of associations and the structure of association.

(i) Distribution of Associations:

It is conventionally found that some of the responses to a certain stimulus are unique, being made by one subject only. This kind of response is called an 'idiosyncratic response'. Many responses, in contrast, are given by more than one S; some of them are made much more often than others. The responses are arranged in a rank-order of frequency to show the frequency of occurrence (or strength) of the different responses to each stimulus. The most frequent response (the response given by the majority of Ss) is called the primary response, the second in frequency is the secondary response, and the third is called the tertiary response, and so on.

To take an example (Table 1) the different responses to the word stimulus 'bread' given by 400 English Ss (Miller, 1970). The whole distribution of the responses is called the 'response hierarchy' of the stimulus word. The responses are called the 'associates' of the stimulus. The stimulus word and any associative response are called an 'associative cluster'. The first three responses (primary, secondary and tertiary) are known as

Table 1: Response hierarchy to the stimulus 'bread'

Stimulus	Responses	Frequency
Bread	Butter	222
	Jam	15
	Cheese	14
	Food	14
	Water	14
	Different responses	63

the 'communality'. From Table 1 we can see that the communality is 63 per cent which is considered to be high.

The distribution of responses to a stimulus yielded in free association is defined as the 'associative meaning' (Deese, 1965: 41). In other words, the distribution of responses invoked by a particular word as stimulus defines the meaning of that word. The only ways in which such meaning can be specified are: (1) by the nature of the distribution itself, and (2) by the relations that distribution has to distributions of responses to other linguistic forms as stimuli (Deese, 1965: 43). For example, some stimuli yield similar responses. The two stimuli 'sacred' and 'holy' share responses such as 'church, God, religion and religious' (Cofer, 1972: 860). These two stimuli are said to be associatively related or indicate "associative overlap".

(ii) Classification of Associations:

The associative responses of subjects are usually classified to infer certain information. There have been different classifications parallel to the history of the notion of association itself. Generally "no classification scheme has been entirely satisfactory, however, because each is in some way an attempt to impose a non-associative principle of organization upon associations. Thus, logic, grammar and various semantic schemes have been brought into use in the attempt to describe the structure of association" (Deese, 1965: 39).

The modern conventional classification of associations is in terms of paradigmatic and syntagmatic responses. Paradigmatic responses are those of the same grammatical class of the stimuli whereas syntagmatics are those of different grammatical classes from the stimuli. Both types of association will be discussed in relation to the researcher's associative data.

On the other hand, the researcher argues that word associations reveal a complex structure which cannot be accounted for only from one point of view. Thus, the researcher will analyse his data within a three-dimensional framework: linguistic, cognitive, and cultural.

(iii) Structure of Associations:

The traditional analysis of the associative structure is based entirely on the classical laws of

association. It implies the notions in which associations are organized and identifies the types of relations and dimensions which underlie associative structure, that is, contiguity in experience, similarity and contrast.

This introspective analysis, as will be shown below, has been criticized because it fails to reflect the grammatical structure of the language on the one hand, and does not reflect cognitive development on the other.

The recent approach to the analysis of the structure of associations is the featural approach which will be discussed in detail below.

1.6 Variables Affecting the Associative Responses

It has been found that the associative responses produced by Ss in WAT can be affected by many variables. The most influential variables may be grouped under two main headings: stimulus variables and subject variables.

1.6.1 Stimulus Variables

These are affectivity, frequency, context and part of speech.

a) Affectivity:

Stimulus affectivity (emotionality) refers to the emotional connotations which St may have as being, for example, pleasant, hostile, bad or taboo. Emotionality

may be determined by ratings made by the E, by independent judges, or by Ss themselves.

Gramer (1965) found emotional stimuli to elicit more different responses than neutral ones. Deering (1963) found emotional stimuli to elicit more idiosyncratic responses than neutral ones. Jacobs (1959) and Kolers (1963) reported that emotional stimuli elicit a greater variety of words among primary responses, while neutral ones produce more identical responses.

Concerning the relation between St emotionality and RT, it has been found that emotional stimuli are responded to more slowly than neutral ones (Brown, 1965; Bodwin and Geer, 1965). Smack and Thompson (1954) found the greatest response reaction time for culturally taboo stimuli.

b) Frequency:

Stimulus frequency is mainly determined by the Thorndike-Lorge word count. Sometimes it is determined by the subjects' ratings of familiarity. Generally, it has been found that frequency or familiarity is inversely related to the number of different responses obtained across Ss based on one response per S, i.e. high frequency stimuli elicit fewer different responses (Gramer, 1965; Veness, 1962; Postman, 1964).

On the other hand, high frequency stimuli have shorter RT than low frequency stimuli (Jacobs, 1955; Wallenhorst, 1965).

c) Context:

By stimulus context is meant the order in which the stimulus list of WAT is presented. Wynne, Gerjuoy and Schiffman (1965) employed a list in which some words possessed opposites and other words did not. For one condition these antonym stimuli occurred in the first part of the list; in another condition they were placed towards the end of the list; and in a third order the antonyms were evenly placed throughout the list. Thus, although the total list was exactly the same, the order of presentation varied. When antonyms were placed in a block at either end of the list, more opposites were given as responses than when the antonyms were evenly distributed in the list.

d) Part of speech:

Considering the different functional roles of words from different grammatical classes, it seems quite possible that some features of the distribution of associations might vary with the grammatical class of the stimulus words.

Fillenbaum and Jones (1965) found that adjectives elicit the strongest primaries compared with nouns, whereas conjunctions elicit the weakest primaries; pronouns, adverbs, prepositions and verbs are respectively intermediate in primary response strength.

Entwistle and Forsyth (1963) found response communality (frequency of the first three responses) to be

greatest for adjectives, less for nouns and least for verbs. Brown and Berks (1960) stated that paradigmatic responses (responses that are from the grammatical class of the stimulus) are greatest for count nouns, and then decrease for adjectives, whereas verbs, adverbs and mass nouns, respectively, are intermediate.

Deese (1962) found that HF adjective stimuli produce more paradigmatic responses. In 1965 Deese reported that paradigmatic responses to adjectives are generally either antonyms or synonyms. HF adjectives elicit antonyms, whereas LF adjectives elicit synonyms. Unfamiliar adjectives elicit syntagmatic responses (responses that are not from the grammatical class of the stimulus words).

1.6.2 Subject Variables

These are: sex, age, educational level and socioeconomic status, and occupation.

a) Sex:

It has been found that there are considerable differences in the associative responses between males and females. In a series of studies by Palermo and Jenkins (1963, 1964, 1965a), it was noticed that females give a greater number of primary responses than males at all age levels from grade one through college.

As regards response communality, Palermo (1963), Palermo and Jenkins (1965a) reported that a greater percentage of females give the first three common responses and usually this tendency continues to the fifth response; in the associative hierarchy. They also reported that males give more superordinate responses than females.

Palermo (1963) found that females give more contrast (antonym) responses than males at all age levels from grade one through college.

b) Age:

It has been observed by different investigators that children usually give quite remarkably syntagmatic responses. Towards the middle of childhood (between age 5 and 10) there is a systematic change from syntagmatic responses to paradigmatic ones (Brown and Berks, 1960; Entwisle, Forsyth and Muuss, 1964; Entwisle 1966; Erwin, 1961). The syntagmatic-paradigmatic shift will be dealt with in length in relation to "Language Acquisition".

Palermo (1964, 1965, reported in Cramer, 1968) indicated that there is an increase in the primary response strength of children over age range. Children give less frequent responses, then through age the primary responses increase as an indication to moving towards social uniformity.

c) Socioeconomic status:

Entwisle and Forsyth (1963) indicated that the associative response communality is greater for high-socioeconomic-status children than for low-status children.

Entwisle (1966) confirmed this observation.

d) Social class and educational level

Rosenzweig (1964) made a comparison between the associations of American students and workmen and those of French students and workmen. Besides the question of differences or similarities among different linguistic communities, he wanted to know whether within one linguistic community there might be differences in the associative structure of the different social facets of the community.

It was found that in the French group there are greater differences between students and workmen than in the American group. It was surprising to find that the responses of French students were more in accord with those of American students than with those of French workmen.

It was also observed that superordinate responses were more frequent among American subjects than among the French, and were more frequent among workers than among students.

It is worth noting that Rosenzweig reported, as a striking remark, that French workers rarely responded to adjectives with adjectives, whereas among the other groups the adjectival responses to adjectival stimuli were

particularly common. It is also worth noting that French workers gave a greater number of adjectival responses to nouns (about 40%) whereas among the other groups the adjectival responses to nouns were not more than 1%.

Although this study reflects the linguistic usage between social classes within one community it can also be considered a reflection of the educational level.

e) Occupation:

Foley and MacMillan (1943) found that the more homogeneous the subjects' backgrounds, the more similar their verbal associations. For example, the responses of professional groups have been compared. Lawyers respond more like other lawyers than they do like doctors. They studied associative responses of students in medical school and in law school using words that have different meanings in two professions. For instance, the word 'administer' is used differently in law and medicine; the medical students responded to it with words like: dosage, sick and attend. The law students responded with words like: estate, govern and justice.

1.6.3 Independent Variable

Another independent variable which has been found to be of important influence on the associative responses

is RT allowed to elicit responses. Horton, Marlowe and Crowne (1963) reported that speeded instructions led to more common responses than relaxed instructions. Siipola, Walker and Kolb (1955) found that even the grammatical class of responses differ according to RT allowed. Adjective stimulus words tend to evoke responses of the same grammatical form class under speeded conditions, but with relaxed conditions adjective stimuli produce more noun responses.

Moran, Mefferd and Kimble (1964) found three classes of Ss: those in the first class gave mostly contrasts (big - little; man - woman) and coordinates (yellow - blue; apple - orange) and responded very quickly. Those in the second class gave synonyms (big - large) and superordinates (apple - fruit) and responded less quickly. The last gave functional associations (red - apple; needle - thread) and responded quite slowly.

1.7 Diachronic Studies of Word Association

The main objective of the diachronic studies of word association is to know if there is any change in associative responses across different chronological periods both for adults and children.

1.7.1 Adults

In 1956 Dörken compared adult responses obtained in 1910, 1925, 1952, 1953 and 1954, to ten stimuli with

strong primaries. He indicated that the percentage frequency of primary response increased with each year sampled.

In 1959, Jenkins published a study in which he compared the responses of 1910, 1929 and 1952. He reported that the frequency of primary responses changed. The most frequent responses in 1929 were still the most frequent in 1952 but their frequency had increased by one third. The idiosyncratic responses of 1910 became more and more infrequent. In 1952 nearly all responses were identical. The communality increased from hardly half of all responses to nearly two thirds. Jenkins also reported that superordinate responses are replaced by coordinates; abstract responses decrease; concrete responses increase.

In 1960, Jenkins and Russell compared the responses of 1910, 1925, 1927, 1933 and 1952 and reported similar results. In 1965, Jenkins and Palermo added to the previous study (1960) norms of 1942 and 1960 and also concluded to the same findings.

1.7.2 Children

In 1964, Entwisle et al. made an extensive study and concluded that the syntagmatic-paradigmatic shift in children's associations occurs between age 5 - 10 and confirmed the previous studies by Ervin (1961) and Brown and Berko (1960). They compared their findings

with the findings of Woodrow and Lowell (1916) and came to the conclusion that "there has been a marked change in associative responses of children over the past 50 years. The age patterns present in our data suggest that the developmental sequence of word associations has been considerably accelerated, perhaps by 4 to 5 years" (p.25). They found that the S-P shift in Woodrow and Lowell's sample occurred between 9 and 12. This may be due to the incremental influence of mass media, standardization of formal education and increasing urbanization.

Palermo and Jenkins (1963) and Koff (1965) reached close conclusions to that.

1.8 Cross-cultural Studies of Word Association

A few cross-cultural studies of word association have investigated the associative responses of different linguistic communities. Mainly, they have attempted to predict the cultural similarities and differences among the cultures of these communities through word associations.

Rosenzweig (1961) compared the available associative data in American, German, French and Italian Kent-Rosanoff studies. He reported a strong tendency for the primary responses to be similar in these communities. This indicates that there are associative structures transcending single linguistic communities. The more frequently a primary response occurs in one language, the greater is the probability that the equivalent

response to the corresponding stimulus word also occurs in the kindred languages.

This view was supported by Ervin and Landar (1963) who studied the responses of Navahos in comparison with the above-mentioned languages. They found that there was a greater degree of agreement among the European languages than between each of these and the Navaho language.

In 1964 Rosenzweig made an interesting comparison between the associative responses of American students and workers and those of French students and workers. Besides the question of differences or similarities among different linguistic communities, he wanted to know whether within one linguistic community there might be differences in the associative structures of the different social facets of the community. He found that in the French group there were greater differences between students and workmen than in the American groups. Whereas in France only 40 per cent of the primary responses were identical, in the American 68 per cent were alike. It was surprising to find that the responses of French students were more in accord with those of American students than with those of French workmen. It was also observed that superordinate responses were more frequent among American subjects than among the French, and were more frequent among workmen than students.

K.M. Miller (1970) compared the associative

responses of English and Australian students to 100 words from the Kent-Rosenoff Test. The English sample consisted of 200 men and 200 women from seven universities located throughout England. The median age of the Ss was 18 years and 5 months. The data were collected during 1961 and 1962. (To the knowledge of the researcher this is the only available associative data from English native speakers.)

The Australian sample consisted of 122 females and 78 males (i.e. 200). They were university students. The data were collected in 1957 and 1958.

Miller did not give any explanation; he simply supplied the associative norms of both samples.

Rosenzweig and Miller (1966) published a detailed comparison of the responses obtained in the US, Australia and England. They aimed at answering the question: Is there a single language community that includes speakers who are native to England, the US and Australia?

They wanted to test the hypothesis that adult speakers of all three countries belong to the same language community by comparing the associative responses they make to a common list of stimuli. To make it clearer, they compared the norms of speakers of these three countries with other western European languages: French, German and Italian.

The results indicated the following:

- (1) Subjects in US show high communality of responses.

The primary response accounts, on the average, for over one third of all responses. The first three responses account for over half of all responses.

(2) In comparison, Western European countries (France, Germany, Italy) reveal more diversity of responses. The primary response accounts for less than two-fifths of all responses.

(3) The Australian and English norms have the high communality of the American norms rather than the diversity of European norms. The primary response accounts for about one third of all responses, and the first three responses account for one half of all responses.

On the whole, it was concluded that there is a greater correspondence of primary responses among English-speaking groups than across other languages.

Finally, the most extensive of the cross-cultural studies is the study by Miron and Wolfe (1964). It was aimed at investigating the applicability of the lognormal distribution to word association responses in a variety of languages when these responses were restricted to qualifiers. It was felt that the parameters of such a distribution might reflect certain aspects of the linguistic habits of Ss from different speech communities.

The Ss were 100 monolingual males from 12 linguistic communities. Their ages ranged from 13 to 17. (Eight Arab speakers from Beirut were involved. To the knowledge of the researcher this is the only Arabic sample

known.¹⁾ The results indicated that associations in some languages were noted to show much greater response stereotypy than in others, that is, one or a few responses would predominate. Japanese was found to be the most stereotyped of the languages studied, and Afghan-Farsi the least stereotyped, with Kannada, Arabic, French, Flemish, Iranian-Farsi, Finnish, Swedish, Dutch, Cantonese and English falling in between.

"It was suggested that this sterotypy could be expected to be the result of stable linguistic connections. The individual's responsiveness to these connections was assumed to be a function of his sensitivity to response repetition within the limits established by the speech community" (p. 384).

1. Reference has been made to a comparative analysis of American and Arab (Jordanian and Egyptian) word associations currently carried out by Szalay (Szalay and Deese, 1978: 155).

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CHAPTER II

WORD ASSOCIATIONS AND FL TEACHING

If, in the construction of a FL syllabus, the lexical content should be selected in accordance with the criteria of vocabulary selection (or control), it may be argued that word associations surpass the traditional criteria in several respects. It is necessary to discuss first the process of vocabulary selection and its statistical techniques.

2.1 Word Associations and Vocabulary Selection

By Vocabulary Selection (Halliday, McIntosh & Strevens, 1964:190) is generally meant the deliberate choice, for teaching purposes, of particular sets of words, and the consequent deliberate rejection of others.

The following criteria represent different statistical techniques used for the selection of vocabulary:

2.1.1 Frequency

Studies of frequency are based on the assumption that the most useful words are the most frequently used by the language users. Thus, the objective of these

studies is to decide what the most frequent words in use are. This means that the relative frequency of each word must be determined. The technique of estimating the relative frequency of words is to take a large corpus of data from different sources and calculate the relative frequency of the words in the corpus. It is noticed that some words occur with greater frequency than others. Then the words are listed in a rank-order according to the frequency of occurrence of each word.

Generally, studies of word frequency are based on the written form of the language, though some studies based on the spoken language have recently appeared, e.g. Howes (1966).

The most famous study based on frequency is that of Thorndike and Lorge: *Teachers' Word Book of 30,000 Words* (1952) which was originally published in 1944. It was based on data of over four million words taken from different written texts. It has been widely used for language teaching purposes and also in psychological experiments of verbal learning.

Generally speaking, word lists based on the criterion of frequency have the following pitfalls:

a) The selection of data is purely subjective. This is obvious in the differences among word lists. For instance, in Horn's (1926) 'approve' and 'contact' are in the first 500 of most frequent words, whereas Thorndike-Lorge count put them in the fourth and fifth

500 words respectively; whilst Thorndike places 'bread' in the first 500 words, Horn puts it in the fifth.

b) An item may be more frequent on the list than others not because of its frequency in language use, but because it is more frequent in some of the texts. For example, the word 'prerequisite': in the standard word counts based on at least one million running words sampled from technical and subtechnical fields we find it eight times. But in a list of sub-technical vocabulary of 100,000 words compiled from four disciplines it occurs 15 times in psychology, 12 times in education, 11 times in medicine, 4 times in economics. From these counts we can deduce that 'prerequisite' is a high frequency word in scientific prose, since it appears a total of 42 times (Cowan, 1974: 391).

c) They reflect the native speakers' needs for their language and do not add to our understanding of the lexical structure of the language. Furthermore they do not tell us in what activities or situations an item may be used.

2.1.2 Availability

To counteract the inadequacies of frequency, Le Francais Fondamental or Basic French added the criterion of ease of recall to that of frequency (Wilkins, 1978: 117). The objective was to provide learners of French with an

indispensable minimum vocabulary, by eliminating all words outside the unnecessary areas (Halliday et al., 1964: 191). The data were based on spoken language taken from tape recordings of items covering different topics.

To investigate the concrete nouns that the French people use, a list of 'centres of interest' (situations) such as: parts of the body, animals, food and drinks, etc., was given to over 900 schoolchildren to write down the twenty words that they thought would be most useful to them under each centre. Thus the French could obtain the most available items and the results were used to supplement frequency lists.

An important study which should be mentioned in this respect is that carried out extensively by Cohen, Bousefield and Whitmarsh (1957). They obtained verbal items for 43 categories from a large sample of population. The subjects were asked to list items which they themselves judged to belong in specified categories. These items were called 'the cultural norms'. The purpose of this study was not language teaching but to be used in the psychological experiments 'on associative clustering in free recall'.

There are two serious deficiencies in studies of availability:

a) There is no guarantee that the items which subjects recall should represent or reflect the native culture. This is supported by the results of availability studies

in Ireland. The Irish children recalled, under the category of animals: tiger, lion and elephant which are not part of the Irish environment (Richards, 1970: 92). This is, in fact, due to the influence of formal education and mass media; these animals are actually very frequent in the children's books.

b) A category such as 'Parts of the Body' should not be included. I see no real significance in asking the subjects to recall the parts of the body unless the subjects are required to give their cultural connotations for the parts of the body as in the case, for example, of word associations.

Usually in such lexical studies subjects use folk taxonomy to recall the objects. Folk taxonomy is the grouping of entities in terms of the category labels given by the culture, rather than by the observer's common-sense or scientific knowledge. It is clear that the category 'Parts of the Body' cannot be recalled according to folk taxonomy (Conklin, 1962).

2.1.3 Familiarity

In his rejection of both criteria of frequency and availability, Richards (1970: 93) offers the criterion of familiarity. It is an attempt to measure the degree of importance people attribute to words. This may be measured by asking subjects to rate words on a scale which

indicates the degree to which they expect to hear, see or use words. A five-point scale from 'very often' to 'never' was used by Richards. Such a rating may be independent of frequency. However, this technique is subjective in the sense that subjects are not free to express their own judgements since they are bound to respond with a certain restricted scale or criterion set by the experimenter.

2.2 Word Associations as a Vocabulary Selection Technique

Now we come to the argument that word associations can overcome the pitfalls that vocabulary selection techniques fail to overcome. Word associations can be used as a predictor of frequency in two different but interdependent senses:

2.2.1 WAT and Verbal Behaviour in Unstructured Situations

Johnson (1956) and Howes (1957) showed that associative response hierarchies are stratified by frequency of usage. Highly popular responses are customarily highly frequent words. Less frequent words make their appearance farther down in the response hierarchies or not at all. Howes developed the argument to answer a very important question: are the phenomena which appear in a word association test and which can be manipulated experimentally applicable to verbal behaviour outside the experimental

situation? The word association test can only serve as an instrument of analysis of verbal behaviour if it is legitimate to 'apply' to linguistic behaviour in general the relationships and regularities revealed in the rather restricted experimental situation.

To answer this question Howes counted the absolute frequencies with which words of certain categories appeared in both the experimental and the everyday situation. If there is a high correlation between these two frequency tables it can be argued that the verbal sampling in the experiment is statistically equivalent to ordinary language use. It would, then, be justifiable to infer that the special conditions of an experiment do not lead to a change in the behaviour which an individual normally employs in the selection of words. On the other hand, if there is a low correlation it must be concluded that verbal behaviour in the association test is governed by different rules from behaviour in ordinary language situations and the word-association test could not be used to throw light on the normal language use.

Howes compared the summed associative probability of a word, i.e. its absolute frequency of occurrence in the norms developed by Kent and Rosanoff, with the probability of the occurrence of the word in everyday language use expressed by the corresponding Thorndike-Lorge values. The comparison revealed a strong positive correlation. Hence, Howes concluded that verbal behaviour

in the word association test was statistically equivalent to the verbal behaviour in unstructured situations.

2.2.2 WAT and Frequency

a) Word associations may predict the frequency of the different senses - or the extension of senses - of a certain word. For example, the word 'short' can be applied to a person, or to distance, or to a period of time. Inspection of associative norms (Miller, 1970: 41) shows that 42% of the responses are applied to distance and time (long), and 25% applied to persons (tall). In my own data the two senses are approximately even in the sample as a whole but there is a difference in the frequency between girls and boys as follows:

	Long	Tall
Boys	34.2%	28.9%
Girls	31.8%	37.9%
Total	66.0%	66.8%

b) Also, word associations can predict the frequency of the different 'homographs': words which look alike and/or sound alike, but have two or more distinctively different meanings. For example the stimulus 'scale' in data yields the response 'weight' 28.8%

whereas it yields the response 'fish' 17.4% of the total responses. Other instances are: 'match' in response to football, cigarette and suit; 'father' in response to mother and church; 'tie' in response to shirt and marriage; 'case' in response to court and suit; 'traffic' in response to jam and red.

c) Furthermore, word associations may indicate the frequency of occurrence of different collocations, e.g. case, worm and shop in response to 'book'; 'case' in response to 'suit'; 'print' in response to 'blue'; 'mark' in response to 'land'. (In a few cases it is hard to tell whether a response is meant to be a collocation or, for example, a superordinate, e.g. 'fruit' in response to 'grape'.)

Given the above mentioned conclusion in (1) that verbal behaviour in the word association test is statistically equivalent to the verbal behaviour in unstructured situations, word associations can be considered a reliable measure of the semantic frequencies mentioned in (2).

2.3 Word Associations and Developmental Changes

From the developmental point of view, word associations undergo two important processes: the shift, in children, from syntagmatic to paradigmatic associations, and the shift from acoustic to semantic associations.

The former will be dealt with in relation to language acquisition.

As regards the latter, it has been reported by Bach and Underwood (1970), Entwisle (1966), Pender (1969) and Ghatala (1970; (reported in Henning 1973), that the younger the children the more acoustic associations they give. Children in the second grade had greater facility in recalling acoustically associative items; whereas sixth grade children showed recall of semantically related items predominant over acoustically related items. This implies that acoustic clustering is a more primitive operation which diminishes as the child grows older and develops semantic clustering.

This phenomenon of acoustic-semantic clustering was studied pedagogically by Henning (1973) in relation to second-language-vocabulary learning. His objective was to "determine whether L2 learners encode vocabulary in memory by families of associated meanings and/or interrelated sounds (acoustic and semantic encoding clusters), and to ascertain the correlation between such encoding and language proficiency" (p. 185). His results indicated that L2 learners do encode vocabulary into acoustic and semantic memory clusters. Learners at a low-proficiency level appeared to register vocabulary in memory more by sound similarities than by related meanings; high-proficiency-level learners relied on associated meanings rather than sound similarities.

Therefore, Henning (p. 194) suggests that 'since encoding is related to high proficiency, all vocabulary teaching should focus on the meanings of words without attention to acoustic similarities'.

Although Henning's suggestion is tenable, the important question that raises itself is: what pedagogic approach is appropriate for 'the focusing on the meanings of words'?

I want to argue that the semantic relations that word associations manifest can be made use of in the teaching of foreign language vocabulary, i.e. relations such as: antonymy, synonymy, superordination, subordination, coordination, etc.

The featural approach to the semantic relations manifest in word associations is appropriate in this respect. McNeill's (1966) pioneer study - which will be discussed later - was the first to apply that featural approach to word associations. Clark (1972) following McNeill and others, gives the most comprehensive description of the featural mechanisms underlying word associations. Therefore, my associative data will be analyzed in the light of Clark's mechanisms.

2.4 Word Associations and Subjective Meaning

Beside these linguistic properties revealed in word associations there is the cultural property which is

equally significant. Word associations reflect the associative and affective meaning specific to the language users of a specific culture. These types of meaning should be taken into consideration in building up the lexical content of FL materials. Word associations provide us with those repetitive patterns which could be interpreted as significant and systematizable patterns of the culture and linguistic behaviour of the native speakers of the FL.

As has been indicated, word associations have shown that the members of a certain culture tend to give, to the same word stimuli, the same word responses. From the sociolinguistic point of view, this implies that they have experienced the same words in the same social contexts. Hence, they perceive words with the same denotations and connotations.

Denotative meaning describes the relationship between words and concrete objects and activities in the physical world. We recognize classes of objects and for each there is an appropriate word which we may use to refer to one or more members of that class or to the class as a whole. Denotative meaning does not relate only to the physical world but also to unobservable "concepts" such as: happiness, courage and hospitality.

Connotations, on the other hand, are derived from the culture and are properly understood when the culture itself is understood. In our mother tongue

(Wilkins, 1978: 122) what a word communicates to us is also partly the product of the associations, linguistic and non-linguistic, that have been built up through our previous experience of the word. This aspect of experience is usually referred to as the connotative meaning. It is concerned with the attitudes of the language users, their emotional reactions to the use of a word.

As a concrete example, the utterance: 'Mr X has a cowardly dog' may have no meaning in some cultures except that Mr X's dog is cowardly. But in the Arab culture, it has very important cultural connotations. It means that Mr X is a very generous, hospitable and sociable person. Many visitors and guests drop in to the extent that his dog does not bark at the sight of any person because it has lost its ability to distinguish between friends and strangers.

It is also normal that words may have personal connotations, i.e. connotations not shared by the members of the culture but only by one individual or a few individuals. These personal or idiosyncratic connotations are not significant for language teaching. Thus, though WAT provides us with those idiosyncratic connotations reflected in the idiosyncratic responses, our main concern is the common or popular connotations reflected in the common responses, i.e. those of high frequency of occurrence.

It is expected that the English and Egyptian

learners will respond differently to word stimuli which reflect cultural differences. On the other hand, it is expected that both may respond similarly to the stimuli in the aspects which both cultures overlap or are similar.

For instance, the word 'pig' has the same denotative meaning for both the English and Egyptians. But for cultural reasons it has different connotations for both. For the English 'pig' is an animal which they eat; for the Egyptians, for religious reasons, it is taboo. On the other hand, it is normal for the Egyptians to refer to a 'stupid' person as a 'pig', whereas for the English it means 'a dirty, ill-mannered person'; also it has, for the English, other collocational meanings.

Another example is the word 'umbrella' which in the Egyptian culture is mainly used for 'sun' and rarely for 'rain'. In the English culture it is always used for 'rain' and never for 'sun'.

Hence, we can predict the cultural overlap and difference between the English and Egyptian culture via the semantic content of association. This will help throw light on the ways to be followed to present the English associations to the Egyptian learners.

It follows then that word associations can reflect the subjective meaning of culture. Subjective meaning, i.e. meaning as a subjective reaction, involves "the individual's actual understanding, perception, and evaluation, even though certain elements of this

understanding are necessarily vague, ambiguous, and not readily communicable" (Szalay and Deese, 1978: 4).

Psychological aspects of the reactions individuals have to words and the concepts behind words are the substance of subjective meaning. Thus to learn something about the structure of subjective meaning we should conceive of a meaningful reaction as being "the aggregate of component reactions and potential component reactions irrespective of their linguistic or logical status" (p. 4).

Subjective meaning is subject to the rules that characterize the dynamic interaction between external stimuli and the internal states or dispositions of the individual. Of these, focusing and selectivity are particularly significant. The meaning reaction is focused and highly selective. "A few components will play roles of critical importance, while a broad variety of objective characteristics of the referent will receive little, if any, representation. In other words, we can distinguish between more and less salient components" (p. 5).

The salience of components in the study of subjective meaning has great importance. "The meanings held by individuals and groups rarely differ in an absolute qualitative sense but often differ quantitatively in the salience of their components" (p. 5). (The notion of "salience of components" is equivalent to the notion of "frequency of occurrence" in the behaviourist tradition.

A more salient component, for example, means a response of high frequency of occurrence.)

It is worthy of note that subjective meaning is unstable and changeable. This, of course, is consistent with the fact that culture itself is changeable. New elements are always introduced and old ones may disappear. Other elements undergo certain modifications. Hence, the reactions to all these elements may differ. (This point will be developed in Chapter IV.) Diachronic studies of word associations reflect this aspect of subjective meaning.

2.5 Word Associations, Communicative Competence and Native Speaker Insight

It has been mentioned above that word associations provide us with those repetitive patterns which could be interpreted as significant and systematizable patterns of the culture and linguistic behaviour of the native speakers of the foreign language.

Hence, it may be argued that these patterns reflect the 'communicative competence' of the native speakers of the foreign language. But the problem with the notion of 'communicative competence', at least in theory, is its diversity. Munby (1978), for example, cites eleven approaches to this notion. He then tries to fuse these eleven approaches in one unified approach

which he calls "the competence constellation".

Another difficulty with the notion of "competence" is that it is neither language- nor culture-specific. Since word associations are both language- and culture-specific, it is important to relate them to an approach which is also language- and culture-specific. This approach is proposed by Broughton (1978) in terms of "Native Speaker Insight" (NSI), and "Native Speaker Type Insight" (NSI1).

The NSI is that "intuitive mastery of the features and processes of the native language which result from a maximum exposure to the language, an intimate relationship shared in varying degrees by all members of a speech community ... NSI is a faculty, a relationship between the user and his language, effective at all linguistic and paralinguistic levels and as culture-specific as any other body of social modes."

The NSI1 is, on the other hand, that "faculty whereby a non-native speaker in an English or English type environment, uses the (English) language with such approximation to native-speaker norms that offence, ridicule, or misinterpretation do not occur: it is a non-idiosyncratic, self-effacing conformity which affords to a foreign speaker honorary membership, as it were, of a speech community."

The NSI has a hierarchical structure of several parameters or levels. At the level of lexis, for example,

it is "NSI which structures items into sets and orders series in a typical way, which throws up typical word-associations, indicates synonyms and antonyms, regulates collocation, acknowledges irreversible binomials, and so forth".

Beside this hierarchical characteristic of NSI, there is another equally important characteristic: multidimensionality. "Given that NSI is a factor common to a speech community, it will vary in strength with the definition of 'community'. Users of in-group language or dialects have insights in common which have little or no external communicative value: conversely, there remains a very large corpus of NSI common to all members of the English-speaking world. But the spatial dimension is probably less complex than the temporal one. An NSI profile of intelligent, educated 40-year-old native speakers in London today ... must show significant differences from a similar one drawn a century ago and must certainly differ from that drawn a century hence. Equally clearly, the NSI profile of a twenty-year-old cohort in London today will show significant variations, and that of a cohort of twelve-year-olds must be different again."

In fact, word associations give support to this property of NSI, both intraculturally and interculturally. This has been shown in Chapter I.

Thus, it may be argued that "we can programme the foreign learner's lexical associations more closely to match the native speaker's".

It may be worthy of note that unlike "competence", NSI does not have two separate components: linguistic and communicative. It has a hierarchical structure which is communicative at each level since the hierarchy itself is embedded in a specific cultural context.

2.6 Foreign-Language Learning and Implications for WAT Construction

Although the view that in introducing the F-L culture emphasis should be concentrated on the areas of overlap with the native culture is sound and justifiable, the researcher argues that areas of difference should also be introduced otherwise there will be the danger that the learners may come to the conclusion that languages and cultures, on the whole, categorize and view the world identically. The objective of introducing F-L culture is, in the researcher's opinion, to introduce the learners to a different way of looking at the world.

The fact that different cultures and languages categorize the physical world differently is reflected in the lexical system of the language.

For example, English has the single generic term 'horse' whereas Arabic has a whole series of different words for different breeds and conditions of

horses (Corder, 1973: 73). The Lapp languages of northern Scandinavia have many words associated with reindeer, and Bedouin Arabic has a large camel vocabulary (Trudgill, 1974: 27). The English lexical series 'walk, march, run, sprint' is not complete in Arabic.

Therefore, from the pedagogic point of view, learning a foreign language does not mean, lexically, a process of translation-equivalents. It is not a process of substituting new names for already attained concepts. Learners have to recategorize some areas, besides learning the different connotations even for that part of the lexicon which has the same denotations in both the native and foreign languages.

The FL learner is likely to face the following possibilities:

- a) A concept may have the same denotations in both languages, but have different connotations. This may form a problem for the learner since he has to acquire the connotations of the concept in FL.
- b) A concept may be present in the learner's native language but absent from the FL in which case there is no problem for the learner.
- c) A concept may be absent from the native language but present in FL. The learner's problem, then, is to acquire that concept.
- d) A concept may have one lexical item in the native language, but different ones in FL. In such

case the learner faces the problem of learning a set of lexical items attached to one concept. If the case is the reverse there is no problem for the learner.

e) A concept may be encoded in the native language by a single word, but by a phrase in the foreign language. This may increase the learner's burden of memorizing.

f) A concept may be found in both languages, but classified differently. For example (Corder, 1973: 99), if you point to a 'herring' and ask a Norwegian speaker what he calls it in his language, he will say: 'sild'. Thus, 'sild' is a translation of herring, and has the same referential relations in the outside world. Now every English speaker knows that 'herrings' are a sort of fish. There is a semantic relation between the two words; the word 'fish' is superordinately related to the word 'herring'. Now ask the Norwegian how he translates 'fish' into Norwegian. He will most probably say 'fisk'. But in everyday Norwegian it turns out that 'sild' and 'fisk' are not semantically related in this way; in other words 'sild' is not a sort of 'fisk'.

Another instance is 'tomato'. From the point of view of English eating habits, 'tomato' may be a 'fruit' or a 'vegetable'. For the Egyptians 'tomato' is never a fruit.

In such cases, the FL learner has to learn a new taxonomic classification.

Consequently, in the construction of the test,

it is essential that all the concepts presented as stimuli should, on the one hand, be known to both the English and Egyptian learners, and, on the other, have the same denotative meanings in both English and Arabic.

CHAPTER IIICONSTRUCTION OF THE WORDASSOCIATION TEST

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CHAPTER III

CONSTRUCTION OF THE WORD

ASSOCIATION TEST

In the construction of the test it is necessary to take into consideration the current background of the teaching of English and its objectives in Egypt. The reason is to know to what extent our approach conforms to the objectives of teaching English on the one hand, and to what extent these objectives meet the current needs of the Egyptian learners, on the other.

3.1 Teaching of English in Egypt

In Egypt, children - at the age of six - join the primary school which lasts six years. At the age of twelve they join the preparatory school for three years. At the age of fifteen, pupils join the secondary school for another three years where they are to be prepared for the university.

Learning English begins in the preparatory stage and continues in the secondary school, i.e. the Egyptian learners learn English for six years. English is called 'the first foreign language' because there are second foreign languages, e.g. French, German and Italian. The only criterion for deciding who should learn English or

any other language is the total score obtained at the end of the primary school. Usually about 85% of the learners learn English.

3.1.1 Objectives of Teaching English in Egypt

Unfortunately the objectives of teaching English are not clear and moreover they are not well set and defined.

(i) Objectives in the preparatory school:

(Ministry of Education, Egypt, 1968/69):

"The aim of teaching English in preparatory school is to enable the pupils to acquire a reasonable command of the basic structures of the language. In learning a new language the chief problem is not at first that of learning vocabulary items. It is, in the opinion of modern linguists, the mastery of the sound system to understand the stream of speech, to hear the distinctive sound features and to approximate their production. The second problem is the mastery of the word order that constitutes the basic structures of the language."

Although the objectives are taken from the documents of the Egyptian Ministry of Education in 1968, the underlined words are quoted from Fries's "Teaching and Learning English as a Foreign Language" published in 1946.

Another serious snag is that 'word order' is

considered equivalent to the mastery of the whole grammatical structure of the language.

On the other hand, the methodology of English is based on the behaviourist tradition: "As language is a habit and a skill, repetition is most essential and chorus work is a great help."

It is obvious that these objectives completely ignore the functional or communicative needs of the learners. There is no mention of the learners' needs or in what situations or activities or for what functions English is to be used.

(ii) Objectives in the Secondary School:

(Ministry of Education, 1966)

1) General Aims: (p. 106)

- a) Development of critical responsibility;
- b) Development of appreciation for cultural heritage (topics dealing with leaders of thought, great patriots, scientists, discoverers, inventors, as well as the achievements of the United Nations Organization and its specialised agencies).
- c) Development of attitudes of critical thinking.
- d) Development of appreciation of aesthetic values.

2) Specific Aims:

"The main aim is to help the students achieve increasing mastery of language skills: speech, reading and writing. It is expected of a secondary school

graduate to be able, for example, to express himself satisfactorily in both the spoken and written forms, to be able to read with understanding - with little or no assistance - the average textbooks or reference books usually assigned for college freshmen, and to be able to understand the language of the native speakers with whom he may come in business or personal contact."

In fact the textbooks concentrate on the general aims which are actually the general aims of the educational system. But the general aims of the educational system and the specific aims of language teaching should surely not be identical.

The expectation indicated above cannot be achieved. There is a constant and a common complaint in Egypt that not only the secondary school graduate, but also the university graduate is unable to utter a single simple sentence in English correctly.

It is worth mentioning, here, that English is not a course in the university and the language of instruction is Arabic except in the faculties of medicine, engineering and science where only a few courses are taught in scientific English. Thus the preparation of learners "to be able to read with understanding the average textbooks or reference books usually assigned for college freshmen" has no sound or actual basis.

Underachievement in English is the biggest educational problem in Egypt. Although a learner can pass the English course with a minimum score of 32%,

the majority of learners fail to achieve that low score and as a consequence they have to repeat all the courses, and some learners repeat them more than once.

3.1.2 Textbooks

The series taught in Egypt called 'Living English' is set up by a group of Egyptian linguists who received their education in linguistics in America in the late fifties and early sixties. The series is based on the audio-lingual method.

The cultural and situational contexts represented in the series are deliberately local. The characters, the vocabulary, the situations and activities created are all drawn from the learners' own local environment.

Even those lessons which do not represent the local culture cannot help the learners acquire the communicative functions of the language. For example, some of the local topics in the preparatory school series are: horse dancing, fencing and the village. The un-local topics cover such situations as: Somalia and how the people raise meat; Japan and the cultivation of pearls and manufacture of children's toys; William Tell: three lessons about a patriot in the history of Switzerland; and two lessons about 'The Wise Bird'.

Unfortunately, the inspectors and senior masters

of English (1970) are happy with that. In their words: "The situations in the books are taken from situations in the pupils' lives, therefore the structures that express these situations help the pupil express himself in current English."

A fatal mistake in their words is that they believe that because the situations are familiar to the learners, they can speak English fluently.

I would like to mention in this respect a situation which falsifies this belief. The first-year secondary textbook included three lessons about the educational system of Egypt. I was fortunate enough to experience them both as a learner in 1961 and as a teacher of English in 1969. In both situations I found these lessons highly boring and unstimulating. I still remember the words of a pupil of mine; in a voice full of anger and boredom he said: "Sir, why do we study this? We know all that!"

On the other hand, the textbooks in the secondary school largely reflect the general aims mentioned above. The topics concentrate heavily on aim (b).

Therefore, the researcher - in the selection of categories and vocabulary items of the text - is faced with the task of formulating his own suggestions concerning the learners' needs and what situations and activities they are likely to participate in.

It is true, at least in some parts of Egypt,

that the need for the communicative use of English should be represented in the syllabus from the very beginning. In the Suez Canal area, Alexandria, Upper Egypt: especially Luxor and Aswan, and some parts of Cairo, learners deal with tourists almost daily. The learners face situations such as showing someone around, selling and exchanging goods and telling the direction.

Furthermore, thousands of Egyptian students travel every year during the summer holiday and specially to Britain.

Thus, though the teaching of English in the Egyptian schools lasts six consecutive years, there is an urgent need for presenting the communicative functions of the language early in the course. The contexts and situations represented in the syllabus should achieve this purpose. This point will be developed in Chapter 4.

3.2 Construction of the Word Association Test

3.2.1 Selection of Categories and Stimuli

Since the associative data of the research are meant to be used for pedagogic purposes, I have selected the taxonomic categories and lexical items for the test from several pedagogic sources:

1. Broughton, G. (1973), Success with English, The Penguin Course, London.

2. The Commonwealth Office of Education, Sydney, Australia (1973), Situational English.
3. Ministry of Education, Egypt (1969), Living English Series.
4. O'Neill, R., Kingsbury, R. and Yeadon, T. (1973), Kernel Lessons.
5. Ek, V.J. (1972), Analysis of the problems involved in defining, in operational terms, a basic competence level in foreign language learning by adults.

To make the findings reliable I selected a wide range of categories and items. The following twenty categories are selected:

- | | |
|--|-----------------------------------|
| 1. Parts of the body | 11. Clothes |
| 2. Professions and occupations | 12. Weather |
| 3. Vegetables | 13. Illness |
| 4. Fruit | 14. Sports and games |
| 5. Foods (other than vegetables, fruits) and drinks. | 15. Entertainment |
| 6. Types of human dwelling | 16. Buying and selling (shopping) |
| 7. Transportation | 17. Tourism |
| 8. Furniture | 18. Colours |
| 9. Animals | 19. Family and social relations |
| 10. Time | 20. Miscellaneous. |

(See the test below for the stimulus words.)

3.2.2 Relationships among Stimuli

The relationships among the items of a category may have two types:

a) A relationship through contextual contiguity, that is, through the occurrence of items together in real life. That is the case of the words which come to mind when we think of, for example, the farm. We think of field, cow, plough, farmer, crops, etc.

b) Another type of grouping takes place when a concept such as, for instance, 'pointed objects' is thought of. This may call to mind items such as: pencil, arrow and rocket. Those items are not necessarily found together in the real world.

Therefore, the categories overlap to a great extent. For example, 'liver and kidney' may be included under the category "Parts of the body" and under "Foods" as well. "Buying and selling" may overlap with "Foods, Drinks, Vegetables and Fruit". 'Nurse and doctor' may come under the category "Professions" as well as "Illness".

The items will be put in random order for two reasons:

1) Not all the taxonomic categories include the same items. (The example of 'herring' and 'fish', 'sild and 'fisk' mentioned above.)

2) To avoid the influence of the presence of the category names on the testees' associative responses.

If the items are listed under categories, some learners may misunderstand the purpose of the test. For example, in the presence of the category name "Fruits", they may give other kinds of fruit and so on with the other categories.

3.3 Characteristics of the Stimulus Words

3.3.1 General

- a. The concepts conveyed by the stimuli should be known and familiar to both the English and Egyptian learners.
- b. The stimuli should have the same denotative meanings for both the English and Egyptian learners.
- c. The stimuli should be of the same form classes in both English and Arabic.

3.3.2 Stimulus Words and Form Class

- a. The grammatical classes of stimuli are clear in the sense that each stimulus word has a definite grammatical class.
- b. The total number of stimuli is 250 classified as follows: ~~194~~ nouns, ~~36~~ verbs, and 20 adjectives.

3.3.3 Stimulus Words and Problematic Cases

- a. Sometimes the form class of the English stimulus is

ambiguous. For example, 'drink, play and visit' may be nouns or verbs. Such ambiguity is very rare in Arabic. To face such a problem, I put (to) before the stimuli which are intended to be verbs.

b. A common phenomenon in English is that of homographs. I had to decide which meaning should be translated into Arabic. Hence, I examined the responses of the English learners to such homographs. The frequency of responses to a homograph reflects the frequency of the meanings of that homograph as indicated in Chapter II. I then translated the most frequent meaning indicated by the most frequent responses.

c. In Arabic animate nouns have two forms, i.e. masculine and feminine. In English most nouns are neutral, i.e. refer to both male and female as, for example, friend. In such neutral cases the equivalent masculine form in Arabic is used. In some cases such as nurse, the feminine form is used since nurses in England are mainly females.

d. The stimulus word "washing machine" is translated into Arabic as 'electric washer' because the word 'washer' in colloquial Arabic is used for both "the machine" and "the human being".

e. The stimulus word "uncle" in English refers to both the father's brother and the mother's brother. In Arabic it refers to the father's brother only.

3.4 Testees

Again to make the findings reliable a relatively big sample was selected.

a) The English sample/^{was}selected from the following areas: London, Essex, Sussex, Kent and Brighton. The total number of the sample was 385, including 190 boys and 195 girls. The average age of the testees, who were in the fourth form, was 15 years.

b) The Egyptian sample was selected from the following population areas: Cairo, Alexandria, Tanta, Zagazig and Luxor (see Appendix 3 for map of Egypt). The total number was 387, including 198 boys and 189 girls. The average age of the testees, who were in the first year of the secondary school, was 15 years.

I did my best within the administrative facilities available to make both samples true cross-sections of the population in the sense that they reflected different geographical areas (industrial, rural and urban), different social classes and different mental abilities.

3.5 Reaction Time

Testees were given 7 seconds for each stimulus word. Thus, the whole test lasted 30 minutes.

3.6 Instructions

See the English version of the test in Appendix 1 and the Arabic version of the test in Appendix 2.

CHAPTER IVLANGUAGE, CULTURE AND THOUGHT

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CHAPTER IV

LANGUAGE, CULTURE AND THOUGHT

In this chapter we are dealing with a three-dimensional issue, i.e. the relationship between language, culture and thought. In my view, to deal with this issue properly, it is more tenable and logical to tackle each component or dimension separately, then we can seek the relationship between them all.

4.1 Language

In dealing with language, I adopt a functional approach to it. A functional approach (Halliday, 1974: 7) to language means, first of all, investigating how language is used: trying to find out what are the purposes that language serves for us, and how we are able to achieve these purposes through speaking and listening, reading and writing. But it also means more than this. It means seeking to explain the nature of language in functional terms: seeing whether language itself has been shaped by use, and if so, in what ways - how the form of language has been determined by the functions it has evolved to serve.

Language is a very complex phenomenon. Therefore, scholars differ on the functions of language depending, on the one hand, upon the approach they adopt to

the nature of language as a human phenomenon, and, on the other, upon the purposes of their classifications.

4.1.1 Approaches to Language

Although all scholars agree on the fact that language is a "human" phenomenon, they differ in their approaches to its nature, i.e. whether language is a purely linguistic phenomenon, or a behavioural one, or a social phenomenon. Hence, we can identify three different approaches:

(i) The Psycholinguistic Approach:

This sees language as a psychological phenomenon. It is interested in the behaviour, overt and covert, of the individual. Consequently, language from this perspective is a branch of psychology. Generally, this approach is mainly concerned with studying language acquisition and its relation to human cognitive system, and with the psychological mechanisms underlying the comprehension and production of speech.

(ii) The Sociolinguistic Approach:

This is concerned with language as a social phenomenon of the community. It concentrates upon the social communicative functions of language among people. Thus, it involves a very complex network of factors: the people, their attitudes, their way of life, social

status, interests, etc. In other words, it involves studying language in its culture. Hence, from this perspective, language is considered a social science (Hymes, 1972).

(iii) The Linguistic Approach:

This is concerned with the study of language for its own sake. It is interested in the internal structure of language as an abstract system regardless of its functions and irrespective of how it is acquired. Therefore, its data are not people and their behaviour, as in the other two above approaches, but texts and recorded utterances. This approach classifies linguistic entities and seeks the relations between them according to three conventional levels: phonological, lexical and grammatical.

4.1.2 Functions of Language

It is a commonplace in linguistic literature to define language functionally as the most frequently used and most highly developed form of human communication (Crystal, 1974: 30). This general definition underlies the diversity of classifications discussed below. But the researcher stresses the fact that although these classifications deal with the verbal component of communication only, the non-verbal component is equally important and has its own structure and its own functions (Argyle, 1972).

From the perspective of the difference between "the biology of communication in man and animals", Marshall (1972: 235) distinguishes two types of communication: intentional and non-intentional. Then he differentiates between two parallel functions: "communicative" for the intentional type, and "informative" for the non-intentional type. "My dropping a piece of priceless china may 'inform' you, or indicate, that I am clumsy. But unless I 'intend' my action to so inform you, we would not regard it as 'communicative'."

Also from the point of view of the difference between human and non-human language, Lyons (1972) distinguishes two main functions of human language: "cognitive" and "attitudinal" or "social" functions. The "cognitive" function refers to what many would consider to be the most distinctively human function of language, the transmission of propositional, or factual information and discursive reasoning or cognition. The attitudinal or social function refers to the establishment and maintenance of social rapport.

Lyons indicates that the "verbal component" of communication is more closely associated with the "cognitive", and the "non-verbal" with the attitudinal function of language.

A behaviourist approach to language (Carroll, 1964: 4) identifies two major functions:

(i) as a system of responses by which individuals communicate

- with each other (inter-individual or interpersonal communication);
- (ii) as a system of responses that facilitates thinking and action for the individual (intra-individual communication).

In his attempt to consider language in terms of its use, Halliday (1972: 74) proposes that there is a close relationship between language structure and language function. He, then, distinguishes three grammatically relevant language functions:

- (i) The ideational: language serves for the expression of "content", that is, of the speaker's experience of the real world, including the inner world of his own consciousness.
- (ii) The interpersonal: language serves to establish social relations, for the expression of social roles, which include the communication roles created by language itself. Through this function social groups are delimited, and the individual is identified and reinforced, since by enabling him to interact with others language also serves in the expression and development of his own personality.
- (iii) The textual: language has to provide for making links with itself and with features of the situation in which it is used. It is this function that enables the speaker or writer to construct "texts", or connected passages of discourse that is situationally relevant;

and enables the listener or reader to distinguish a text from a random set of sentences.

A more detailed account of the functions of language is given by Hymes (1968) and adopted by Corder (1973: 42-46) in terms of the factors involved in the process of communication, namely, the speaker, the hearer, contact between them, the linguistic code used, the setting, the topic and the form of the message. Each of these factors may be the focus of the speech act, the element in the situation to which the activity is oriented.

It is now customary to refer to language functions in terms of speech acts. Speech acts (Searle: 1969), not sentences, are the basic or minimal units of linguistic communication. Searle analyses speech acts into four types:

a) utterance acts: are uttering words and sentences and are therefore part of all speech acts because a speaker cannot perform a speech act without speaking.

b) propositional acts: are the production of meaningful sentences such as referring and predicting (or, saying something about something).

c) illocutionary acts: are acts such as complaining, promising, questioning, stating, warning, requesting, and so forth.

d) perlocutionary acts: deal with the effects that speech acts have on listeners in modifying their

behaviour or beliefs and including persuading, alarming, intimidating, alerting, pleasing, etc.

The advantage of this classification over the above-mentioned ones, is that these four types are not mutually exclusive, but rather should be understood as the various aspects of speech acts that are needed for a full description of what is going on when a speaker says something to a listener.

It can also be seen that any speech act must include at least the first three types: that is, any bit of linguistic communication must be an utterance, must have propositional meaning, and must have some intended illocutionary force; but it may or may not produce the intended perlocutionary effect.

4.1.3 Language and F-L Teaching

A teacher of a foreign language should have a 'scientific' knowledge of language. Scientific in the sense that it should be explicit, systematic and comprehensive to include all sides and aspects of language.

From the pedagogic point of view, the crucial question is not which view is right, but which view or views about language are useful. All ways of viewing language are relevant to language teaching and any disregard of one aspect will imply that something important may be missing. If language (Allen and Corder, 1973: 2)

is knowledge then learning it will share some of the characteristics of learning, say, chemistry; if it is skilful behaviour, it will be something we acquire through descriptions or through use, while if it is a social event we shall wish to participate in the social interaction in which it is manifest.

If all views about language are relevant to language teaching, which approach to language should be adopted?

Pedagogically, a psycholinguistic approach to language teaching will describe the terminal behaviour, to be achieved by the syllabus, in behavioural terms, i.e. the ability to master the so-called language 'skills': speaking, understanding, reading and writing.

On the other hand, a linguistic approach to language teaching will produce a rule-based syllabus whose ultimate objective is the mastery of the grammatical rules of language.

In this thesis a functional approach to language has been adopted and a functional approach in language teaching is favoured. This approach, expressed in sociolinguistic terms, describes the terminal behaviour of learners in terms of 'language functions', i.e. what roles the learners will play in the foreign culture, what situations they will participate in, in what social group they will operate, or, in other words, what 'functions' of language the learners need to master. Moreover,

learners should acquire the phenomenon of situational shifting or stylistic choice, i.e. how to choose the appropriate linguistic utterances for the appropriate contexts. Stylistic choice is subject to both linguistic and social restraints; linguistic restraints relate to the intelligibility of utterances; social restraints relate to their acceptability. "Stylistic choice becomes a problem when we are away from our accustomed social surroundings. Expressions which are customary in our own group might quite easily offend our interlocutor and jeopardize our mutual relationship by misleading messages" (Gumperz, 1972: 46).

The pedagogic implication of this is that, first, a foreign language should be taught within its own cultural context, and, second, learners should acquire this process of stylistic choice or situational shifting.

4.2 Culture

4.2.1 Nature and Characteristics of Culture

It is often argued that the most important characteristic of culture is that it is, like language, species-specific, a man-made.

There have been (Shapiro, 1971: 4) a number of attempts to identify the specifically human characteristics of man. He has been set apart from the other

animals by his upright posture and highly developed brain. He has been distinguished as the creature that laughs, speaks, or thinks. He has also been described as the creature that has a culture.

Culture (Hoebel, 1971: 208-9) is the integrated sum total of learned behaviour traits which are manifest and shared by the members of a society. The factor of learned behaviour is of crucial importance. It is essential to the concept of culture that instincts, innate reflexes, and many other biologically inherited forms of behaviour be ruled out. Culture is, therefore, the result of social invention.

The human capacity for culture is a consequence of man's complex and plastic nervous system on the one hand, and of his possession of a verbal symbolic system: language, on the other.

To show the necessity of language for the existence of culture, Hoijer (1971: 269) compares man and apes. A society lacking language would have no means of assuring the continuity of behaviour and learning necessary to the creation of culture. Lacking language, the apes have no way of continuing in word and thought their separate experiences in the use of tools and techniques. By reason of language, man's experiences are continuous, not discontinuous as among apes, and so show far more rapid development. Moreover, man's possession of language enables him to share the experiences and thoughts of his fellows

and to recreate his personal experiences for their benefit.

This leads us to another characteristic of culture, i.e. it is cumulative. Culture among men reveals progress. Each generation takes over, by word of mouth and tradition, the accumulated knowledge of its predecessors, adds its own contributions as drawn from its experiences and observations, and passes the whole on to succeeding generations. This cumulative aspect, which differentiates human cultures from the kind of knowledge current in animal societies, is made possible by language.

A third characteristic of culture is that it is dynamic. This does not imply that culture is always growing. This means that culture is constantly changing in the sense that a culture may develop and nourish and may also decline and fade away.

Because culture is an integrated whole, changes in the several parts of a culture cannot be regarded as distinct and unrelated but must be viewed as different aspects of a single process. Changes in one part of a culture must inevitably result, sooner or later, in changes in other aspects.

It is worthy of note that some elements of culture are easily changeable while others are not. The material elements are generally easily changeable. The moral or spiritual components of culture are more stable because people usually resist any attempt to change them.

4.2.2 Approaches to Culture

While most American anthropologists adopt a behaviouristic approach to culture, some American linguists adopt a structural approach to it. For example, Lado (1964: 111-115) defines culture as "a structured system of patterned behaviour". He describes his structural analysis of culture as follows:

- a) the "functioning units" of patterns, as for instance, breakfast, lunch and dinner;
- b) the "classes" of patterns which may be static, e.g. men, women, doctors, etc.; processes, e.g. to rest, to eat, to study, etc.; and qualities, e.g. fast, good, bad, etc.;
- c) the "forms" of patterns, as for example, the components of breakfast or dinner;
- d) the "meaning" of patterns, like forms, are culturally determined. They represent an analysis of the universe as grasped in a culture. Eating breakfast, for example, has a primary meaning: to provide food and drink for the body. It may have a secondary meaning as well: a particular form of breakfast may carry a social class identification or religious identification.
- e) the "distribution" of units involves various time cycles, space locations, and positions in relation to other units.

On the whole, behaviourist and structural approaches to culture confine it to the "learned" and "overt" behaviour. But such a perspective is restrictive and narrow. A perspective to culture should be

comprehensive in the widest sense to include all aspects: physical and non-physical; material and non-material; overt and covert; verbal and non-verbal as well.

To sum up, we have to answer the question: What is culture? The members of a community, beside possessing a common linguistic code, share sets of beliefs, political or ethical, they share to a large extent the way they construe the world, how they classify objective phenomena, what meaning they give to this classification. Communities share a common history and agree about what is or is not important to them, a common value system. They agree about the right and wrong ways of getting things done, of dressing, eating, marrying, worshipping, educating their young and so on. All these things are their culture (Corder, 1973: 68). Perhaps the most important fact about culture is its distinctiveness, i.e. every culture has its own distinctive way of doing things. A culture is more than a fortuitous assemblage of traits; each culture possesses, in addition to its trait content, a unique organization in terms of which its distinct components are significantly related to one another.

Language integrated in its cultural context can be seen in the light of the notions of 'context of culture' and 'context of situation' developed by Malinowski and Firth (Edwards, 1976: 60-70; Halliday, 1974: 49; Robins, 1971: 25-27).

Language, from this point of view, is a form of behavioural potential, i.e. a range of possibilities, an open-ended set of options in behaviour that are available to the individual in his existence as social man. The context of culture is the environment for the total set of these options, while the context of situation is the environment of any particular selection that is made from within them. Malinowski distinguished between the potential and the actual. The context of culture defines the potential, the range of possibilities that are open. The actual choice among these possibilities takes place within a given context of situation.

On the other hand, Firth concerned himself with the generalized repetitive patterns of actual behaviour, context of situations. He built his linguistic theory around the original concept of 'system' as a means of describing the potential, and relating the actual to it. A system is the set of options that is specified for a given environment.

Treated in terms of context of situation, the meaning of utterances includes differences of personal status, family and social relations, degrees of intimacy, relative ages, and other such factors. Meaning in language is therefore not a single relation or a single sort of relation, but involves a set of multiple and various relations holding between the utterance and its parts and the relevant features and components of the environment,

both cultural and physical, and forming part of the more extensive system of interpersonal relations involved in the existence of human societies.

It is important, in this respect, to note that the repetitive character of language behaviour does not contradict the creative character of language system. Creativeness (Hassan, 1971: 133-5) does not consist in producing new sentences. The newness of a sentence is a quite unimportant property, and creativity in language lies in the speaker's ability to create new meanings: to realize the potentiality of language for the indefinite extension of its resources to new contexts of situations.

It is evident now that there is a growing interest in the significance of the cultural context of language, or, in other words, studying language in its cultural context.

So far we have discussed the relationship between language and culture from the sociolinguistic perspective. To deal with this relationship from the psycholinguistic point of view, another dimension should be added, namely, thought. The relationship between language, culture, and thought is the topic of the next section.

4.2.3 Language and Culture

It is evident now that language and culture are indispensable to each other. In this section we intend to have a closer look at the interdependence between them.

Language is largely the principal device for the transmission of culture from generation to generation. Language plays the role of a mediator between the individual and culture. The transmission of culture takes place through socialization. Socialization refers to the process whereby a child acquires a specific cultural identity (Bernstein, 1975: 331), whereby biological is transformed into specific cultural being. It follows from this that the process of socialization is a complex process of control, whereby a particular moral, cognitive and affective awareness is evoked in the child and given a specific form and content. Socialization sensitizes the child to various orderings of society as these are made substantive in the various roles he is expected to play. The basic agencies of socialization in contemporary societies are the family, the peer group, school and work (and also mass media). It is through these agencies, and in particular through their relationship to each other, that the various orderings of society are made manifest.

The socialization of the young in the family

proceeds within a critical set of interrelated contexts. Analytically, we may distinguish four contexts (p. 339):

a) The regulative context, includes the authority relationships where the child is made aware of the rules of the moral order and their various backings.

b) The instructional context, where the child learns about the objective nature of objects and persons, and acquires skills of various kinds.

c) The imaginative or innovating context, where the child is encouraged to experiment and re-create his world on his own terms, and in his own way.

d) The interpersonal context, where the child is made aware of affective states - his own, and others.

Following Bernstein, Halliday (1974: 11-18) stresses the fact that through this sociolinguistic context of socialization the child internalizes the 'functions' of language.

An important implication of this is that cultures differ in ways and contexts of socializations. These differences in the process of socialization lead, in turn, to different thinking modes.

Another important connection between language and culture is manifest in the prevailing notion that language is a reflection of culture. Hence our task is to show in what way is language an index of its associated culture? Which level(s) of language reflects

the cultural categories and concepts?

A) Language and ecology:

The natural surroundings of the environment in which the members of a culture live may be reflected in the lexicon of the language of that culture. For example, Eskimoes have several codable words for the different types of snow. In Arabic there is a large number of codable words for sand and camel. This does not merely reflect the natural environment of the users of the language, but does, in fact, indicate their interests, needs and preoccupations. The fact that some languages have a larger vocabulary for certain objects or concepts than others is an indicator of the importance of these objects and concepts in the culture. Differentiation between different types of snow is more important in the life of the Eskimoes than in that of the English who have not such differentiation. When the need for such differentiation disappears, the usage of the codable terms parallel to these distinctions also disappears. This is true in the case of Arabic. When the interest in and the significance of camel and sand faded away, the large vocabulary denoting several distinctions disappeared from the language of everyday life. They have become a part of the history of the language.

B) Language and social structure:

i) Language and social stratification:

Studies of the relationship between language and social stratification (Bernstein, 1967, 1973; Labov, 1972) show that it is possible to distinguish different varieties of language according to the social class membership.

At the phonological level, for example, we can distinguish different accents. At the grammatical level we can distinguish different "sociolects" which may differ in vocabulary as well. (Fishman (1971) uses the term "sociolects" to refer to the variety of language in relation to social class and keeps the term "dialect" for the variety of language in relation to geographical area.)

Is there a clear link between the social class and the variety of language used?

Bernstein (1973) distinguishes two varieties of language: elaborated code (or formal language) and restricted code (or public language) according to social class membership. The former is associated with the middle class and the latter with the working class.

In the elaborated code the use of subordinate clauses, passive verbs, adjectives, uncommon adverbs and conjunctions, and the pronoun I, is relatively high. It is used in situations like a formal debate or academic discussion. It is context independent in the sense that it does not rely on extra-linguistic features such as facial expression to convey meaning.

On the other hand, restricted code is used in informal situations. It is context-dependent. It is characterized, for example, by the phenomenon of "sympathetic circularity", i.e. the frequent use of such utterances as: wouldn't it? You see? You know? (Bernstein, 1967).

Consequently, Bernstein implied that working-class children are verbally deprived. But the recent research (Hawkins, 1977: 194-5) concluded that "there was no evidence that the lower-class children were verbally deprived in the sense that they said very little or uttered one-word sentences ... There are no social class differences in linguistic competence. Working-class children appear to have access to as wide a range of syntactic options as middle-class children: potentially, they can produce and interpret the same set of grammatical sentences, by drawing on an underlying competence which differs very little".

Moreover, Hawkins rigorously stressed the importance of context of situation and offers this proposition: "Given a particular speech function, or context, different speakers, by virtue of differences in their social origins, or experience of role-relationship, etc., may employ different strategies of communication."

ii) Language and kinship system:

A society's kinship system is generally reflected in its kinship vocabulary. It is possible to assume that the important kin relationship in a society can be reflected

in the codable lexicon of the language. In English, for example, the distinction between 'maternal' and 'paternal' aunt and uncle is not culturally important, and thus is not reflected in the codable lexicon. In Arabic, in contrast, it is culturally significant and hence reflected in the codable lexicon, i.e. there is a distinct word for each of these distinctions: maternal aunt, paternal aunt, maternal uncle and paternal uncle.

It is important to distinguish between the cultural classification and linguistic (lexical) classification of kinship. For example, linguistically "brother" means: "son of the same parents as another person". In some cultures, including the Egyptian, an intimate friend or neighbour may be considered a "brother" and may have the status of a blood brother. Such distinctions are not codable in language although they are of crucial importance for the understanding of culture.

iii) Language and values:

The values of culture can also have its influence on the language. The phenomenon of "taboo" shows this influence explicitly. Taboo can be characterized as being concerned with the behaviour which is culturally forbidden, or regarded as immoral or improper. In language, taboo is associated with things which are not said, and in particular with words and expressions which are not used.

Generally, the type of word that is tabooed in

a particular language will be a good reflection of at least part of the system of values and beliefs of the society in question. In the English-speaking world (Trudgill, 1974: 30), the most severe taboos are now associated with words connected with sex, closely followed by those connected with excretion and the Christian religion. The same situation holds also in the Arabic-speaking world.

Taboo is therefore a linguistic as well as a sociological fact. It is the words themselves, not the concepts they convey, which are felt to be wrong and are therefore so powerful.

A third connection between language and culture is in the fact that language is responsive to cultural change. Since language is a part of the cultural system, changes in language take place, in part at least, in response to cultural changes in general. Hoijer (1966: 457) goes further and stresses that "to understand and generalize on linguistic change, we must see it as a part of the wider process of cultural change".

There are many instances which suggest that periods of significant change in culture are roughly coincident with marked shifts in linguistic structure. The Russian revolution (Friederich, 1966) led to important social changes that the kinship vocabulary in use in Czarist reign had to be changed to some degree. In

Czarist days stratificational distinctions, that recognized gradation of power, wealth, and proximity within the universe of kin, were very explicit. After the revolution, Soviet society stressed far fewer and broader distinctions. As a consequence, various kinship terms were abandoned entirely, others were merged and others were expanded.

Howell (1967) reports a very similar development in Javanese with respect to its highly stratified system of terms of address. This phenomenon occurred also in Egypt after the 1952 revolution; many titles and forms of address have been abandoned, others have been expanded.

An obvious relation exists between lexical (semantic) change and cultural change. As a people acquire, by invention or borrowing, new concepts of any sort, there are concomitant additions to the vocabulary of their language. In some cases, the lexical change takes the form of neologism. In other cases it consists of borrowed terms or transfer of meaning.

Thus, the lexical component of language is principally responsive to cultural changes.

In conclusion, we can say that the relationship between language and culture is one of interdependence. This relationship may be better viewed by looking at language and culture from a developmental point of view.

Throughout his development and socialization, the

child does not only internalize an abstract linguistic system, i.e. linguistic competence, but does also internalize, at the same time, a concomitant abstract cultural system, i.e. cultural competence. The child must be able to understand and produce utterances which are not so much grammatical, but more important, appropriate to the contexts in which they are made.

4.3 Language, Culture and Thought

The linguist who started people thinking seriously about the relationship between language, culture and thought was Benjamin Lee Whorf. His view (or hypothesis) involves two propositions:

First: "Language determines thought", referred to as the principle of linguistic determinism.

Second: "Every language embodies a definite world view", referred to as the principle of linguistic relativity.

Originally Whorf's view was influenced by Edward Sapir. No wonder, then, this view is conventionally called the 'Sapir-Whorf Hypothesis'. But this S-W hypothesis can historically be attributed to Wilhelm von Humboldt and his view of 'Weltanschauung'.

Hence, we start the discussion of linguistic determinism and relativity with Humboldt.

4.3.1 Humboldt's Hypothesis (Penn, 1972: 19-22)

Humboldt was the first to emphasize the magnitude of the difference among cultures as revealed in their languages. The main tenets of his hypothesis are:

1) The world view (Weltanschauung) of one people differs from that of another people, and this is due to the difference in the 'internal structure' of their respective languages.

2) The internal structure of language is something like the semantic labelling of reality; even more it is the structuring of the world imposed by semantic units.

3) Man does not perceive, conceive or think except as he uses language. In other words, thought is impossible without language. On the other hand, Humboldt denied that before there was language, there was thought. Man, whether individually or collectively, did not create language. In Humboldt's words: "The mental characteristics and the development of language of a nation are so intimately bound up with each other that if the one were known the other could be completely deduced from it. For intellect and language permit and develop only forms which are mutually compatible. Language can be said to be the outward manifestation of the mind of nations. Their language is their mind, and their mind their language. One must imagine them as completely identical" (Hörmann, 1971: 301).

4.3.2 Sapir's Hypothesis

Sapir's view may be represented by that often quoted passage: "Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the real world is to a large extent unconsciously built up on the language habits of the group ... The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached" (Sapir, 1929: 209).

Sapir also believes that thought without language is impossible: "The writer, for one, is strongly of the opinion that the feeling entertained by so many that they can think, or even reason without language is an illusion" (Sapir, 1921: 14). At another point (Sapir, 1949: 15) he says that "thought ... is hardly possible in any sustained sense without the symbolic organization brought by language."

Sapir, like Humboldt, denied that man created language. What, then, is the source of language in his

view? Sapir (1921: 9) argues that: "If language can be said to be 'localized' in the brain, it is only in the general and rather useless sense in which all aspects of consciousness, all human interest and activity, may be said to be 'in the brain'. Hence we have no recourse but to accept language as a fully formed functional system within man's 'psychic' or 'spiritual' constitution. We can not define it as an entity in psychophysical terms alone, however much the psychophysical basis is essential to its functioning in the individual." Sapir admits, in the last quotation, two facts:

1) Language is localized or internalized in the brain in the 'general' sense. This may be parallel to Saussure's *langue*.

2) The individual adheres to that internalized 'general' sense in his production of speech which may be parallel to Saussure's *parole*.

Thus, this 'general' localization or internalization of the language in the brain cannot be, as Sapir claims, useless. Sapir claims that it is useless to avoid admitting its existence in the brain, on the one hand, and its functional influence on thought, on the other.

4.3.3 Whorf's Hypothesis

Whorf (1971: 212-4) explicitly expresses his view in the following passage: "... the background

linguistic system (in other words, the grammar) of each language is not merely a reproducing instrument for voicing ideas but rather is itself the shaper of ideas, the program and guide for the individual's mental activity, for his analysis of impressions, for his synthesis of his mental stock in trade. Formulation of ideas is not an independent process, strictly rational in the old sense, but is part of a particular grammar, and differs, from slightly to greatly, between different grammars. We dissect nature along lines laid down by our native languages. The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds - and this means largely by the linguistic systems in our minds. We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way - an agreement that holds throughout our speech community and is codified in the patterns of our language. The agreement is, of course, an implicit and unstated one, but its terms are absolutely obligatory; we cannot talk at all except by subscribing to the organization and classification of data which the agreement decrees."

Thus we can see that Whorf, like Humboldt and Sapir, denies the possibility of thinking without language;

he believes that: "thinking itself is in language" (p. 252).

In brief, Whorf calls his view: "a new principle of relativity, which holds that all observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar, or can in some way be calibrated" (p. 214).

4.3.4 The Sapir-Whorf Hypothesis: The Empirical Evidence

On the whole, the empirical investigations of the S-W hypothesis do not lend support to its implications: determinism and relativity.

To study the influence of language on thought, investigators have studied the cognitive differences between different linguistic communities. They studied how speakers of different languages behave non-linguistically in order to know whether the absence or presence of any linguistic form (lexical or grammatical) has any cognitive influence on non-linguistic behaviour. For example, are the speakers of language A capable of perceiving certain objects or events which have no corresponding linguistic forms in their language? Are the speakers of language B capable of forming concepts which have no corresponding linguistic forms in their language?

It is noteworthy, in this respect, that it is extremely important to differentiate between conclusions

based on the lexical differences between languages, and those based on the structural (grammatical) differences.

a) Differences in the Lexicon:

Lexical differences involve the ways in which things are labelled, and this can include the number of labels or words for things, the ways in which concepts are categorized, and the presence or absence of super-ordinate categories. The often quoted example of lexical differences between languages is the number of words for snow. In the Eskimo lexicon (Brown and Lenneberg, 1954: 238) there are three words to distinguish three varieties of snow. There are no single-word equivalents for these in English. The word 'snow' would be used to describe all three. What psychological conclusions can be drawn from these data? Does the Eskimo see differences and similarities that we are unable to see? The answer of course is no. English speakers have to, when necessary, use phrases while the Eskimos use single words. And it is inappropriate to make any cognitive conclusions from such linguistic information.

The phenomenon of using single words is known as codability (or codifiability). It is an economical device used by the members of a culture to refer to objects, events and concepts which are conventionally useful and important for the people to distinguish. In other words, codability reflects the cultural interests

and needs of the people of the culture.

This phenomenon of codifiability (Boas, 1966: 122 uses the term "holophrasis") is known in all languages. Some concepts, in some languages, are expressed in codable terms whereas other languages resort to periphrasis. On the other hand, a concept may have one codable term in some language, whereas it may have more than one term in another language.

It is important to note, here, that the mere existence of a lexical item for an object in the lexicon of a language does not mean that the speakers of that language actually possess that object. A clear example is the "atomic bomb" which is found in the lexicon of many languages.

Another always viable area for study in this respect is that of colour terminology. Brown and Lenneberg (1954) and Lenneberg (1975: 541-3) reported several experiments in which they asked speakers of English and Navaho (which differ in their lexical codability) to perform tasks which require breaking up the spectrum conceptually into colours which do not correspond to the way their languages do it. They concluded that people are capable of conceptualizing colours in ways different from that of their language. Heider and Olivier (1972) came to the same conclusion.

A final area to be considered is that of kinship terminology. As has been indicated in the previous section the kinship terms may reflect the social kinship system of society. This does not imply that, from the kinship terms, we can make any inferences about the psychological relations among relatives, for example. As Greenberg (1971: 9-10) states: "the existence of separate unanalyzable terms for father's brother and mother's brother makes us posit no difference in reaction to these relatives. It does not tell us wherein the difference consists, whether, for example, the first is treated with deference but the second with familiarity. To discover this, we must observe behaviour, both verbal and nonverbal, that is, what things are habitually said and done with reference to the father's brother and the mother's brother."

Such reactions to family members, for example, are not linguistically codable, i.e. cannot be known from language but rather from culture. But word associations may reveal such reactions. To test this, kinship vocabulary is included in the Word Association Test.

B) Differences in the Grammar:

Whorf assumes that grammatical categories are also symbolic categories. When he finds structural differences in languages he concludes that there are parallel cognitive differences. The crucial point is

that Whorf sees these differences in cognition to be the product of differences in grammatical categories.

To test the possibility of making any cognitive inferences from grammatical data, it is necessary to determine the semantic patterns that attach to structural patterns.

On the one hand, we find that not all the structural patterns of the language have the same degree of semantic importance. In English, for example, it is not difficult to ascertain the semantic correlates of the structural distinction between singular and plural nouns; in most cases this is simply a division into the categories 'one' versus 'more than one' (Hoijer, 1971: 97).

On the other hand, there is no one-to-one relation between the semantic patterns and the structural patterns. For instance, punctuality has no corresponding structural pattern. Do French, for example, conceptualize interpersonal relations differently than English do simply because French specify their relations to the people they talk to by choosing the 'familiar' or 'intimate' *tu*, or the 'polite' or 'formal' *vous*, whereas the English do not make such choice since English has only one form 'you'? The answer is simply: No. Because English people have other devices to make such choice, e.g. the use of Christian names and surnames; the use or not of titles.

To take a final example, English has the word-order 'adjective + noun', whereas Arabic has the reverse

order. It is naive to infer from that that the English speakers are "inductive" in their thinking and Arabic speakers think "deductively". Inductiveness and deductiveness are, of course, a matter of logic which is open to all peoples and independent of language.

To sum up, Lenneberg (1975: 553) concludes that "the empirical research ... indicates that the cognitive processes studied so far are largely independent from peculiarities of any natural language and, in fact, that cognition can develop to a certain extent even in the absence of knowledge of any language. The reverse does not hold true; the growth and development of language does appear to require a certain minimum state of maturity and specificity of cognition."

Besides the empirical invalidation of S-W hypothesis indicated above, it is worth adding the following complementary hints:

(i) An implication of the S-W hypothesis is that translation from one language to another is impossible. In this respect, Whorf contradicted his hypothesis since he translated many concepts from American Indian languages into English. In fact, most concepts can be said in any language, but some concepts are more difficult to express in some languages than in others (Hockett, 1971: 123).

(ii) If human cognition was relative to language, in other words, if the structure of language imposed certain

conceptualizations, how can we interpret the fact that a single language often has alternative conceptualizations of the same phenomenon? For instance, in English, Arabic and many other languages, human beings can be categorized by "age" into children, adolescents, and adults. Alternatively they may be categorized as "majors" and "minors" according to political or economic criteria.

(iii) The S-W hypothesis also implies that language forms a static, closed system, and once the fixed categories of the language have been acquired our semantic system is complete. It has been shown that language is very responsive to the process of cultural change. The absence or presence of a certain lexical item in the language is a product of the cultural needs and preoccupations of the people and is independent of the language structure. In other words, distinctions and categorizations are supplied by cultural norms and not linguistic ones.

4.3.5 A Systematization of the Whorfian Hypothesis

Fishman (1960) analyses Whorf's hypothesis and offers a comprehensive systematization of four separate levels:

I. Lexical or semantic codifiability:

Evidence at the lexical level is concerned neither with a truly structural analysis of language nor

with a full-blooded analysis of the non-linguistic concomitants or resultants of language structure. This level is concerned with language - language behaviour. It shows that languages differ in their codifiability of experience.

II. Linguistic codifiability with individual behaviour:

The predictor variables at this level are similar to those of level I, i.e. lexical or semantic codifiability. But the criterion variables are, unlike those of level I, of the non-linguistic behaviour.

Fishman reports the experiments of Brown and Lenneberg (1954), and of Lenneberg (1953, 1957) in which they showed that the more highly codifiable colours are more readily recognized or remembered when they must be selected from among many colours after a period of delay subsequent to their original presentation.

III. Linguistic structure and its cultural concomitants:

This level relates the grammatical structure to group behaviour. Fishman refutes Whorf's inferences (such as the absence of tenses from Hopi language means that the Hopi people's life is timeless) and denies that grammatical structure has cognitive influence.

IV. Linguistic structure and its behavioural concomitants:

This level deals with the grammatical structure and individual behaviour. Fishman, again, finds no support to this relation.

In a recent study Fishman (1972: 287) concludes that: "many years of intensive research have not succeeded in demonstrating it (S-W hypothesis) to be tenable. Although many have tried to do so no one has successfully predicted and demonstrated a cognitive difference between two populations on the basis of the grammatical or other structural differences between their languages alone".

4.3.6 A Developmental Theory of Linguistic Relativity

Carroll (1963) also reviews and refutes S-W hypothesis and offers an alternative which he calls "a developmental theory". Very briefly the core of his view may be stated as follows: "the alternative to a linguistic theory of relativity, namely a theory of linguistic neutrality, would assert that mental operations and other behaviours are independent of the language in which they are carried out ... A world view is more likely to have arisen from social and historical factors which have nothing to do with language" (p. 2).

4.3.7 A Sociolinguistic Approach to Relativity

In his sociolinguistic approach to relativity, Bernstein (1965, 1975) shows how language and culture, together may influence behaviour. He explains his view as follows: "... a number of fashions of speaking ...

are possible in any given language and ... those fashions of speaking, linguistic forms, or codes, are themselves a function of the form social relations take. According to this view, the form of the social relation or - more generally - the social structure, generates distinct linguistic forms or codes and these codes essentially transmit the culture and so constrain behaviour" (1965: 149).

4.4 Language, Culture and Thought and Foreign Language Teaching

In the previous discussion, we have seen that:

- (1) mental operations and other behaviour are independent of the languages in which they are carried out;
- (2) a world view is the product of social and historical factors and is independent of the grammatical structure of language;
- (3) some languages codify some areas of experience and do not codify others;
- (4) some languages use morphological or syntactical devices to express a concept while others use lexical items.

From the pedagogic point of view this means that the learner of a foreign language must be taught to observe and codify experience as nearly as possible in the same way as native speakers of that language.

Relative to the native language of the learner

(Carroll, 1963: 17), some phenomena in the second language are convergent, and some are divergent. Convergent phenomena occur when the referents of two or more symbols in the native language are represented by a smaller number of symbols in the second language. Divergent phenomena occur when the opposite is true, i.e. when the second language contains a larger number of symbols and corresponding semantic distinctions than the first language.

The learning of divergent differences is probably more difficult than the learning of convergent differences, since in the former case a selective response must be made, while in the latter case only an interpretative response is necessary.

For example, an Arabic-speaking learner must be trained to notice and produce the difference between simple and progressive tenses in English; if he has not learned this divergent difference, he is likely to be misunderstood. On the other hand, an English speaker learning Arabic must be aware of the convergent difference in Arabic; he must not produce this difference which is absent from Arabic.

Divergent and convergent contrasts having been identified and described, foreign language teachers must develop special teaching techniques and materials to bring these contrasts to the attention of language learners and to allow them to form appropriate habitual sets incorporating

them in speaking and hearing behaviour.

As has been indicated in this section, translation is possible from one language to another. From the pedagogic point of view, it must be taken into consideration that learning a foreign language is not a process of learning new sets of names for the same things. The learning of a foreign language involves some degree of recategorization, how great this recategorization will be is dependent upon the two languages involved.

In the case of English and Arabic, the two languages are linguistically and culturally very distinct from each other. Thus, both English and Arabic speakers will have different cultural views of the world. Also, the conceptual content of that world is very different. Consequently, Arabic-speaking learners will have to recategorize and recodify familiar things in different ways.

4.5 Culture and Word Association

The most important characteristic of word associations is that they are culturally specific, i.e. they are the product of the specific culture and, consequently, differ from one culture (and language) to another.

In the light of this fact, we can understand the differences, intraculturally, between the associations of the social classes if we look at them as sub-cultures.

It has been shown in Chapter I that word associations can be an index of social class, sex, age, occupation and education.

Looking at word associations interculturally (or interlinguistically), some writers tried to conclude that certain linguistic communities give or share the same word associations.

But it is not tenable to build such a conclusion on the mere observation that the semantic content of associations is similar. Another equally important dimension or criterion which must be taken into consideration is the frequency of occurrence of these associations which reflect the salience of the associations.

Russell and Meseck (1959), reported in H8rmann (1971: 122 and 124), gave the associations of German, French and Americans. I found that the identical associations differ remarkably in their frequency as can be seen from Table 2.

Table 2: German, French and American responses to identical stimuli

Stimulus	Primary response	% German	% French	% American
table	chair	29	53	84
chair	table	20	11	44
eagle	bird	21	16	55

On the other hand, Rosenzweig and Miller (1966) went further. They compared the semantic content of the

associations of USA, Australia and England to prove that there was a single language community that included the speakers of these countries. Again it was found that the identical associations differ markedly in frequency and strength.

Language, as has been concluded in this chapter, is a part of the culture. Thus language alone cannot constrain the cognition of its speakers but rather the culture as a whole including language. Surprisingly Sapir himself (1921: 214) admitted this fact: "Most of us would readily admit, I believe, that the community of language between Great Britain and the United States is far from arguing a like community of culture ... A common language cannot indefinitely set the seal on a common culture when the geographical, political and economic determinants of the culture are no longer the same throughout its area."

A comparison of the associations given by the English and Australians reported by Miller (1970) shows that not only do the similar associations differ remarkably in frequency and in the response hierarchies, but also most associations are different, as shown in Table 3.

Perhaps the only safe inference that can be made is that speakers of languages and cultures which have similar conceptual systems may give more similar semantic associations than those speakers of different or divergent conceptual systems.

Table 3: English and Australian responses to identical stimuli

Stimulus	English		Australian	
	Response Hierarchy	%	Response Hierarchy	%
comfort	ease	15½	chair	34
	chair	14	bed	9½
	bed	7	ease	9
	warmth	5½	discomfort	6
cabbage	green	15	vegetable	19
	vegetable	11	cauliflour	18½
	cauliflour	6	leaf (ves)	7
	patch	5	garden	5½

In conclusion, and from the pedagogic point of view, if we accept that

(1) a foreign language should be taught in its own cultural context,

(2) word associations differ from one age group to another,

(3) word associations are culturally specific, and

(4) we should teach learners to encode approximately like native speakers of the foreign language,

it is essential to establish in the learners the semantic content of associations of the native speakers of the same age group. Word associations, as has been indicated, provide us with those repetitive patterns which could be interpreted as significant and systematizable patterns of the cultural and linguistic behaviour of the community.

In this chapter we have seen how language and culture are interdependent and indispensable to each other. Thus, an important inference is that word associations cannot be only a linguistic phenomenon, i.e. we cannot understand the underlying structure and organization of associations in terms of the internal structure of the language in which the associations are produced. Word associations are not just linguistic entities. Our interest should rather be in the concepts these linguistic entities symbolize and the interrelations between these concepts. In other words we should see word associations as a sociolinguistic phenomenon. This enables us to take into consideration the many sociolinguistic variables that operate on the individual's cognition in producing word associations. Hence, the researcher hypothesizes that word associations as a sociolinguistic phenomenon are subject to the same rules as other sociolinguistic phenomena. This hypothesis is to be developed in the following chapters.

4.6 Culture and Foreign Language Teaching

4.6.1 It is to be stressed that we are not calling for the teaching of foreign culture per se, but rather the teaching of the foreign language in its cultural context. It is also equally important to stress that it is not our claim that foreign learners should adopt the habits and thought-patterns of the native speakers of the foreign language. "The aim of most foreign learners is not assimilation but contact. To understand a wide range of communication patterns typical of native speakers is clearly desirable; to become indistinguishable from any type of native speaker might well be embarrassing, but - much more seriously - would involve a repudiation of one's own origins and personality which few students would want to undertake" (Brumfit, 1978: 41).

The inclusion of a foreign language in a school curriculum cannot be justified wholly on the mere objective of mastering the linguistic system of the FL. This mastery should be a means to an end and not an end in itself. This end is to prepare the learners for future contact with the native speakers of the FL and the possibility of interacting and communicating in the FL community. Hence, a successful and effective communication with the native speakers is probably more expected if the learners are familiar with the FL culture.

Adams (1966: 272-3), for example, reports how

unfamiliarity with culture leads to misunderstanding and unsuccessful communication in an Egyptian village.

Another supportive argument is that since FL, unlike a second language, is not learned to be used within the local native community of the learners, the cultural context of learning the FL should not be the local context, but that of the people whose culture has provided justification for learning that language.

Nostrand (1966: 4-5) states two basic purposes in teaching about a foreign way of life: cross-cultural communication and understanding.

Under the heading of cross-cultural communication the learner should be able to understand the spoken and written language, excepting specialized terms but including the common expressions whose meaning is peculiar to the culture. He should be able to elicit the potential friendliness of the foreign community and avoid causing a "culture shock", the shock that comes of encountering a distinctly different way of life and set of assumptions.

Cross-cultural understanding, on the other hand, is much more complicated. This objective takes into account not only a considerable range of aspects of a culture but also the techniques for understanding cultures.

In learning a foreign language in its cultural context, the learners should gain some "insight" into the

culture. This insight should enable the learners to get rid of or avoid "ethnocentrism": that state of mind in which the ways of one's own group seem natural and right for all human beings everywhere. In other words, learners should acquire the "symbolic elements of a different ethnolinguistic community" (Gardner, 1979: 193). Learners should realize that every culture has its own uniqueness and not to judge the people of other cultures according to the values of their own culture. They should not consider other people as peculiar, bad-mannered, rather stupid or morally lax.

For instance, foreigners (Rivers, 1968: 264) in English-speaking countries have been known to judge acquaintances as indifferent to their welfare and brusque in several relations because they have mistaken the customary greeting of "How are you?" for a genuine enquiry about the visitor's state of health; they have then been disconcerted when their English-speaking acquaintances have not waited for a reply to the query.

Similarly, African students learning English were shocked when, in a dialogue they were reading, a person refused a drink when it was offered a second time (Feigenbaum, 1965: 11). In many cultures, this will indicate that the visitor had not enjoyed the drink the first time.

In the USA (Condon, 1975: 42) "Yes" means yes, "no" means no. Americans value being blunt, practical,

objective. In Japan, on the other hand, interpersonal relations are often more important than "objectivity", and indirection, vagueness, or ambiguity are far more valued than bluntness of speech. So in Japan you rarely bear the equivalent of "no", at least not if saying "no" might disappoint someone. So, in Japanese there are at least eighteen ways of avoiding saying 'no' directly, even though in most of the cases the listener fully understands that something like 'no' is meant. And if it should come to a 'Yes-or-no' situation some Japanese will switch into English to state such a crude choice.

Of course, no bilingual Japanese-English dictionary will explain this, it is not a matter of simple semantics. Nor is there anything in the language, Japanese or English or any other, which would account for this. We must look at the semantics of culture, including the values which underlie and govern the use of expressions.

One way of helping learners get rid of 'ethnocentrism' is showing them that there is no such thing as 'linguistic purism' or 'cultural purism'. All languages borrow from each other and so do cultures. For example, in the case of English and Arabic, learners' attention may be attracted to the instances of mutual linguistic borrowing, e.g. the English words: algebra, logarithm, chemistry, macabre, coffee, cake, sugar and assassinate are originally Arabic.

Having gained insight into other people's way

way of life, learners may begin to look at their own way of life more consciously and critically. They may question and criticise certain aspects of their culture.

4.6.2 No wonder then that the growing interest in the sociolinguistic communicative competence, indicated above, is reflected in FL teaching. There is a parallel emphasis on the significance of introducing this cultural aspect of competence to FL learners.

The language classroom should be (McLeod, 1976: 211) the neutral territory between two cultures, where cultural patterns and attitudes can be freely discussed ... The use of an anthropological approach to language teaching enables students to gain communicative as well as linguistic competence and provides interesting and relevant content with which to practise linguistic structures.

Holmes and Brown (1976: 423 and 431) call attention to the constraints imposed on the FL learner in comparison with the native speaker. The process of acquiring sociolinguistic competence is a gradual one for the individual in his native speech community. Differential sociolinguistic competence is evident even among the native speakers of a language. Some people find it difficult to take the initiative in a conversation with a stranger, and misunderstanding of intention does often occur in interaction between native speakers. Moreover all speakers of a language, whether it is their

first or second language are bound by the constraints of appropriateness and politeness in any particular situation. The FL learner, however, is further constrained by the limits of his knowledge of the language and will often therefore produce what he can say rather than what he wants or ought to say. The FL learner lacks time and opportunity to acquire sociolinguistic rules naturally. Thus materials must be devised to facilitate and accelerate the acquisition of sociolinguistic competence in a foreign language.

In learning how to use and interpret the sociolinguistic rules of English he must develop (Hymes, 1972: 287) an awareness of areas where the sociolinguistic system of his native language differs from that of English and where misperception and misanalysis are most likely to occur.

Thus, notions like (Jacobson, 1976: 411 and 422) social interaction, style shifting, metaphorical and situational switching, role relationship, transactional and personal interactions, should be incorporated in EFL programmes. To function in an FL environment, we must know the values and the expectations that our students are to find in a less artificial setting than in our controlled classroom.

4.6.3 Foreign Language, Culture and Literature

Can literature enable learners to gain insight into the foreign language culture?

The researcher's view is that literature cannot provide learners with a true sound picture of a culture. On the contrary, the proper understanding of literature necessitates a prior understanding of the culture of that literature.

Nostrand (1966) advises us to be cautious in generalizing from literature. Similarly, Yousef (1968: 228-9) sees harm in attempting to rely too heavily on cultural generalizations abstracted from literature; he describes the experience of some teachers involved in teaching adult Arabs:

"It was clear to the teachers that literary values were not universal. ... These students of English as a foreign language would never be able to reach an understanding of the people and the culture of the US by studying American literature. Instead, the study of American literature actually seemed to increase misunderstanding and confusion. It was apparent that the students would need pertinent cultural orientation before they could attempt any meaningful literature course."

The same conclusion was also made by Tucker and Gatbonton (1971: 137). They noted that Filipino students studying American literature either failed to understand the values implicitly expressed or interpreted them by filtering them through Filipino culture unless they were made explicitly by the teacher or by specially prepared materials.

CHAPTER V

LANGUAGE ACQUISITION

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CHAPTER V

LANGUAGE ACQUISITION

In the study of language acquisition it is conventional to distinguish between two approaches standing in apparent opposition: 'behaviourism' and 'nativism'. Therefore I shall keep this distinction and discuss the main assumptions and arguments behind each approach.

5.1 Behaviourism

Language acquisition in the behaviouristic tradition is interpreted in terms of 'Theories of Learning'. The most comprehensive behaviouristic account for language acquisition is Skinner's (1957) Verbal Behaviour. The central proposition in this account is that verbal behaviour and other types of behaviour are alike. The variables determining verbal behaviour are actual stimuli and earlier reinforcement. The inherent structure of the language or structural elements within the speaker play no part in the analysis of behaviour because they are not observable and, hence, they cannot be equated with behaviour.

For Skinner, verbal behaviour is behaviour reinforced by the mediation of other persons. Thus, greatest significance is attributed to the element of

learning. Human speech is learned, hence, its acquisition and maintenance must follow the general laws of learning.

Laws of learning determine why in a given situation, these and no other verbal utterances occur. They are descriptive accounts of the events and of the conditions under which these events occur. The description is made in terms of stimulus-response aspects of the present situation and earlier reinforcement. Skinner proposes three techniques or laws: tact, mand, and echoic.

The 'tact' technique is a system that enables children to learn new words through responses to stimulus objects in their surroundings. By responding to such stimulus objects as 'mommy', 'daddy', 'dog' or 'toy', they are developing tacts, or names of stimuli that they are familiar with and wish to respond to.

Through the 'mand' method a child acquires words simply because these words fulfil a need. According to Skinner, there are a number of 'deprivation conditions' that exist and promote mands, which act as inducements for verbal responses. Thus, children will learn, for example, the word 'food' and some of its subclasses, such as 'candy', 'cookie', 'meat', etc., because they know that these are names that represent objects to satisfy their hunger. Other conditions, such as thirst, fatigue, etc., will cause children to learn new words in order to verbalize needs.

The 'echoic' is verbal acquisition via imitation

of adults' speech. However, mimicry is not the only principle in operation here: rather, the importance of positive reinforcement and repetition are particularly evident. When a child speaks appropriate words or uses correct grammar, parents usually provide a reward in the form of a smile, encouragement, etc. Such reinforcement helps to motivate the child towards learning other new words. On the other hand, a single emission of a response, even if it is reinforced, is by no means enough for learning to take place. A response must be repeated several times to be learned. The strength of learning is measured in terms of the number of times that a response has been made and reinforced.

In general outline, that a particular stimulus evokes a particular response is the result of a conditioning process. The response has become attached to a stimulus in a particular manner because of the reinforcement of the S-R sequence. Reinforcement is the presentation of a certain stimulus in a temporal relationship either to another stimulus or response. Responses show regularity because they are under the control of a certain stimulus or a stimulus-quality of an object. If, for example, a 'pen' is described as 'blue', this response occurs under the control of the 'blueness' of the pen.

5.2 Learning of Grammatical Structure

Two different theories to be discussed: a 'mediational' theory, and a 'contextual generalization' theory.

5.2.1 Mediational Theory

Jenkins and Palermo (1964) explain language acquisition in the light of the notion of mediation. They hypothesize that mediation paradigms occur naturally in the speech a child hears from his parents. Random encounters with 'John is pleasant' and 'John is jolly', for example, would lead a child to place 'pleasant' and 'jolly' in the same class. In general, words belong to a class because associations are established among them when they occur in the same (or equivalent) contexts. In this example, the paradigm is the so-called 'response-equivalence' paradigm. In other cases the 'stimulus-equivalence' paradigm applies (e.g. 'John' and 'Christmas' in: John is jolly and Christmas is jolly). More complex cases correspond to more complex paradigms.

Since grammatical classes derive from sequential associations, the organization of classes into sentences can be attributed to these same associations - thus, 'Christmas is pleasant' arises from the sequential association between the two classes established in the examples above, even though 'Christmas' and 'pleasant' are not actually paired in any of the sentences presented.

From the point of view of generative grammar, this mediation theory comprises a finite-state grammar. Such grammar (McNeill, 1968: 408) is made up of a finite number of states, some of which are connected by transitions,

with words produced on transition from one state to another. In this mediation theory the states are grammatical classes, the transitions are the associations among grammatical classes, and a single word from the preceding grammatical class is produced on each transition. The difficulty with such grammar is that in order to acquire grammar through mediation paradigms, a child must learn all the transitions among grammatical classes that are allowable in English; a requirement that seems impossible.

5.2.2 Contextual Theory

In order to explain how the general structure, which determines word order in sentences, is acquired, Braine (1963: 323) offers the notion of 'contextual generalization': "When a subject, who has experienced sentences in which a segment (morpheme, word or phrase) occurs in a certain position and context, later tends to place this segment in the same position in other contexts, the context of the segment will be said to have generalized ..."

On this notion, Braine (1965) proposes a theory for language acquisition. As a child hears sentences from his parents, he notices the position that particular words or phrases occupy in them. For instance, when hearing 'John's sister plays the piano', a child may

notice that 'John's sister' occurs in the first half of the sentence. The process of 'contextual generalization' then carries 'John's sister' into homologous, first-half positions in other sentences. The process is not different from ordinary stimulus-response-generalization since temporal location in an utterance mediates generalization. The merit of this process, from the linguistic point of view, is that it provides a basis for productivity, the capacity to produce or comprehend novel but grammatical utterances. A child learns not only the position of phrases within sentences, but also the position of words within phrases. The result is to instal the hierarchical structure of sentences as a part of children's competence; it is here that the advantage of contextual generalization over mediation theory resides.

Contextual generalization thus yields the kind of structure that is conventionally represented by a phrase-structure grammar. However, it is (Bever, Fodor and Weksel, 1965) a phrase-structure grammar that makes transformations, as they are understood in linguistic theory, quite impossible. Moreover, (McNeill, 1968: 410) the structures learned through contextual generalization lack the property that provides major justification of phrase-structure grammar over finite-state grammar - the property of recursion. In other words it reduces the power of phrase-structure grammar to the level of finite-state grammars.

5.3 Nativism

The nativist approach, which stands in sharp opposition to the behaviourist approach, starts with the rejection of the behaviouristic accounts on the grounds that the concepts of learning theories are inadequate for language acquisition.

5.3.1 Main Tenets

In this approach, the fundamental problem is the simple fact that language acquisition occurs in a surprisingly short time. Grammatical speech does not begin before one-and-one-half years of age. At 18 months or so, children begin to form simple two-and three-word sentences. By the age of four, they are able to produce sentences of most conceivable syntactic types. In approximately 30 months language is acquired, at least that part of it having to do with syntax. In other words a basis for the rich and intricate 'competence' of adult grammar must emerge in that short period of 30 months. Add to rapid acquisition the further fact that what is acquired is knowledge of abstract linguistic structure (Chomsky, 1986; McNeill, 1967, 1968, 1970). A third fact is the creative aspect of the language user's ability to produce novel sentences he has never uttered or heard before. The organism's behavioural repertoire

is inherently infinite. That is to say that (Garret and Fodor, 1968: 455-6) the finite set of linguistic rules a speaker internalizes are, in principle, sufficient to provide him with a repertoire of infinitely many distinct linguistic responses. Nativists reject S-R "performance" models because these models view the organism as consisting of no more than a response library; thus incapable of accounting for indefinitely diversified response repertoires.

Thus we can infer an essential difference between behaviourist and nativist accounts for language acquisition. While behaviourists describe the overt, observable 'performance' of the language user, the nativists argue that the description which is of greatest psychological relevance is the account of "competence", not that of performance.

Linguistic competence (Chomsky, 1965; McNeill, 1967, 1970) is the abstract knowledge a native speaker must have in order to understand any of the infinitely many grammatical sentences of his language. It represents a native speaker's linguistic intuitions.

Performance is the expression of competence in talking or listening to speech. One is competent to deal with an infinite number of grammatical sentences; but one's performance may be distracted in various ways.

Another important difference lies in the terminology but underlies the basic assumptions behind each. Since behaviourists attribute verbal behaviour totally

to learning mechanisms, they deliberately use the term "learning" and avoid the term "acquisition" because it implies some "innate" capacity or mechanism. On the other hand, most behaviourists avoid the term "language" or even "language behaviour" because the term "language" implies the notion of a "linguistic community", hence of something supraindividual, similar to Saussure's "langue". In the light of this we can understand Sapir's (1921: 9) view, mentioned in the previous chapter, that: "if language can be said to be localized in the brain, it is only in the general and rather useless sense in which all aspects of consciousness, all human interest and activity, may be said to be in the brain". Sapir wants to avoid admitting the existence of "langue" by claiming that it is useless.

5.3.2 Criticism of Behavioural Mechanisms

Assuming these facts about linguistic competence, nativists refute the behavioural mechanisms:

Imitation, to begin with, faces two counter-arguments. The first is that if imitation were the governing principle, then we would expect children to produce rather different patterns in their language than in fact they do. This is (Crystal, 1976: 34) clear from the end of the first year. The "Isn't he a lovely little baba den" kind of language is a dominant feature

of the child's environment over the first twelve months, and it is marked by distinctive intonational and tone-of-voice patterns. We would expect these to be picked up and used by the child, but the characteristic intonation patterns of the one-year-old do not display such distinctive patterns.

Another example comes from later development, around age three-and-a-half. If imitation is the norm, then we would expect a child who has made a mistake in grammar, and who is being corrected by his mother, to pick up and use the correction fairly quickly. But he does not do so (McNeill, 1970).

The second argument is in the process often called "analogy". The child who says "I goed" instead of "I went" or "mans" instead of "men" has not acquired these patterns from adults. What he has done is produce new forms by extending his understanding of the regular patterns of the language. The production of such forms is one of the most important stages in normal language development: it shows that the child is adopting an intelligent, deductive, creative role towards his language.

As regards "reinforcement", Chomsky (1959: 42) states that he has been "able to find no support whatsoever for the doctrine of Skinner and others that slow and careful shaping of verbal behaviour through differential reinforcement is an absolute necessity".

5.3.3 Nativist Mechanisms

Now, if these behavioural mechanisms are incapable of illuminating the phenomenon of language acquisition and development, what then is the alternative?

Chomsky (1959) proposes that the child is born with an innate capacity for language acquisition and development. The child is pre-structured towards the development of language, so that when the child is exposed to language, certain language-structuring principles automatically commence to operate. The main tenets of the nativist approach are summarized by Chomsky (1968: 76) as follows: "Suppose that we assign to the mind, as an innate property, the general theory of language that we have called 'universal grammar'. This theory ... specifies a certain subsystem of rules that provides a skeletal structure for any language and a variety of conditions, formal and substantive, that any further elaboration of the grammar must meet. The theory of universal grammar, then, provides a schema to which any particular grammar must conform. Suppose, furthermore, that we can make this schema sufficiently restrictive so that very few possible grammars conforming to the schema will be consistent with the meager and degenerate data actually available to the language learner. His (the child's) task, then, is to search among the possible grammars and select one that is not definitely rejected by the data available

to him. What faces the language learner, under these assumptions, is not the impossible task of inventing a highly abstract and intricately structured theory on the basis of degenerate data, but rather the much more manageable task of determining whether these data belong to one or another of a fairly restricted set of potential language."

The role of experience then is (Katz, 1966: '278) primarily to provide the data against which predictions and thus hypotheses are judged. Experience serves not to provide the things to be copied by the mind, as on the empiricists' account, but to help eliminate false hypotheses about the rules of the language.

Chomsky (1965, 1968) then hypothesizes a mechanism called 'Language Acquisition System' 'LAS' or 'Language Acquisition Device' 'LAD' (McNeill, 1967, 1968, 1970).

5.3.4 Structure of the LAD

On the one hand, Chomsky (1965), Katz (1966), and McNeill (1967) take a 'content' approach to LAD. In their view, the internal structure of LAD consists of the various innate linguistic universals, both substantive and formal. Substantive universals are the phonological, syntactic and semantic units that are universal, not in the sense that they are necessarily present in all

languages, but that they can be defined independently of their occurrence in any particular language and can be identified, when they do occur in particular languages. For example, at the level of phonology, it is held that there is a fixed set of up to twenty distinctive features (e.g. voicing and nasality). Similarly at the levels of syntax and semantics. Such syntactic features as Noun or Verb and such features of the meaning of words as 'male' or 'physical object', belong to fixed sets of elements in terms of which it is possible to describe the syntactic and semantic structure of all languages.

Formal universals are those general principles which determine the form of the rules and the manner of their operation in the grammars of particular languages.

Fodor (1967) and Slobin (1967: 87-8), on the other hand, take a 'process approach' to the structure of LAD. The child is born not with a set of linguistic categories but with some sort of process mechanism - a set of procedures and inference rules - that he uses to process linguistic data. These mechanisms are such that, applying them to the input data, the child ends up with something which is a member of the class of human languages. The linguistic universals, then, are the result of an innate cognitive competence rather than the content of such as a competence. The universals may thus be a derivative consequence of, say, the application of certain inference rules rather than constitute the actual

information in terms of which the child processes linguistic input. (McNeill, 1970: 70-71 modified his views in order to incorporate Slobin's and Foder's inference rules or procedures.)

The function of LAD is specifically to account for the acquisition of syntactic competence.

It is important in this respect to mention the empiricist view on language universals. Empiricists believe that human languages share similar features because they make reference to the properties and objects of the physical world which, presumably, is perceived in essentially the same way by all physiologically and psychologically normal human beings; all languages, in whatever culture they might operate, are called upon to fulfil a similar range of functions (making statements, asking questions, issuing commands, etc.); all languages make use of the same physiological and psychological "apparatus" and the very way in which this operates may be held responsible for some of the formal properties of language (Lyons, 1974: 104-5).

5.4 Acquisition of the Grammatical Structure

Although the order of acquisition of syntactic patterns of language is approximately invariant (Brown, 1973: 58), the rate of development is not. All normal children regardless of how quickly or slowly they are

developing, are following a single developmental path.

It is possible to hypothesize a set of stages through which children pass in their progress towards the adult language. While some researchers follow a chronological classification (e.g. Crystal, Fletcher and Garman, 1976), others follow a syntactic one (e.g. Brown, 1973).

Crystal et al. (p. 61) stress the fact that the stages are not to be viewed as discrete entities, periods of ability which switch off and on. Syntactic development is a continuous process, and the stages are arbitrary divisions along it. The validity of these divisions can be argued on two counts: (1) there is a theoretical justification, that each stage corresponds to some general linguistic process which it is possible to identify in formal terms, and (2) there is a pragmatic justification: using these stages provides a workable scheme for assessment and remediation.

The theoretical justification is also made by Brown (1973: 59).

In fact, despite the superficial difference between these classifications, they have an identical underlying principle. Each classification identifies a certain syntactic process within a certain period of time. Moreover, they agree that syntactic development passes through a specific order: single-word utterances, two-word utterances, and so on until the child develops the

complex syntactic structure.

Perhaps one of the most important contributions of the nativist approach is that many researchers have recognized that the child's language is different from the adult's and that adults must not bestow their own cognitive system on a child's language (Nelson, 1973; Rodgan, 1977; Howe, 1967).

Consequently, several models for child's language have been developed by different scholars. Braine (1963), for example, introduced the model of "pivot grammar" which was adopted by others (e.g. McNeill, 1970). It implies that there are two original word classes which form the two word utterances according to well-established rules. The first class is called "pivot" and the other class is called "open".

This purely syntactic model was rejected by several scholars who emphasized the importance of taking into consideration the immediate context of utterances on the one hand, and the child's conceptual competence on the other (Bloom, 1970, 1971; Slobin, 1971; Brown, 1973; Schaerlakens, 1973).

5.5 When Does the Learning of Grammar Come to an End?

The view that by the age of four or five the child can be assumed to have learned the grammar of his language (Chomsky, 1968; McNeill, 1970), has been falsified by Crystal (1976). He has shown that some

constructions are not acquired even by the age of seven.

Carol Chomsky (1969) also found that some major syntactic structures are acquired between the ages of five to ten. These are relatively complex, but they are not uncommon in ordinary speech. Among these are pairs of sentences that have the same surface structure but different deep structures. For example, John is easy to see, versus John is eager to see; John promised Bill to go v. John told Bill to go. Up to about nine years of age, children could not distinguish these structures.

James and Miller (1973: 74) investigated the children's awareness of "selection restriction rules" in sentences in two groups of children: 4;8 to 5;3 and 6;8 to 7;3 years of age. The sentences used were normal or entail a single selection restriction violation of the features + animate or + human involving the subject-verb or adjective-noun constituents. The older children's superior performance on the identification task indicates that, as children grow older and gain greater linguistic experience, they are more aware of 'selection restriction rules' in sentences. One of the results of increased linguistic experience may be the development of a more complete set of semantic features for lexical items. For example, two of the younger group identified the sentence: 'The big spider skated across the room' as meaningful. The explanations they gave for this were: 'A spider can have little tiny skates', and 'Spiders can

skate if they have skates'. For these children it appears that the verb 'skate' was not marked '+ human'. The older children's explanations contained no such evidence of incomplete sets of semantic features.

In addition to syntactic development, Palermo and Molfese (1972) gave evidence that phonological and semantic development also proceed through childhood into adolescence.

5.6 Behaviourism and Nativism: An Evaluation

We have seen that each approach overemphasizes certain issues to the exclusion of others. Whereas behaviourism stresses the environmental and behavioural factors, nativism stresses the innate capacity.

One of the serious assumptions of nativists (Chomsky, 1959, 1968; McNeill, 1967, 1970; Bever, Fodor and Webber, 1965; Garret and Fodor, 1968) is that no learning is involved at all in the process of acquiring a language and that everything is attributed to the innate capacity.

Although it can be admitted that we are innately predisposed to "structure information" in certain ways, it is equally certain that every behavioural acquisition depends to some extent on the interaction of these predispositions with the environment.

On the other hand, the utter exclusion of the

role of the environmental factors implies that the child throughout the process of language acquisition is a passive factor. That is why Halliday (1974) prefers the term "learning" to "acquisition" in order to stress the fact that the child is an active factor in this process. (Halliday's use of the term "learning" is different from the behaviourists' use.)

It has been indicated above that language is a very complex phenomenon. Consequently its acquisition is so complex a process that it cannot be accounted for by only a single factor. There is a strong evidence that all kinds of factors are involved, affecting the quality as well as the quantity of the child's language acquisition: innate capacity, biological and cognitive development, socioeconomic background, sex, environmental and cultural factors.

Therefore, maturation cannot be the only factor affecting language acquisition as Lenneberg (1967) claims in his biological approach. Kreshen (1973a, 1973b) gave strong evidence against Lenneberg's claim.

As regards "experience", it has been mentioned that Chomsky (1968) stresses that the major source of linguistic information open to the child (the primary linguistic data) is "meager and degenerate". Recent research shows that the data available to the child are neither meagre nor degenerate, but rather systematic. For example:

a) speech to children is fluent and free of errors (Brown and Bellugi, 1964; Snow, 1972; Newport, Gleitman and Gleitman, 1977);

b) adult-to-child speech possesses many special characteristics which distinguish it from adult-to-adult speech (Lord, 1975; Newport, 1976; Garnica, 1977);

c) many of these special features are also found in the speech of young children to even younger children (Sach and Devin, 1976; Shatz and Gelman, 1973);

d) the special modifications in speech to children (termed "motherese" by Newport, 1976) involve syntax, semantics, and both segmental and prosodic aspects of phonology. For example, sentences addressed to children are shorter, slower, and higher in pitch than those addressed to adults. Adult-to-child discourse is also characterised by expansions and self-repetitions.

The role of imitation should not be underestimated. As Crystal (1976: 37) says "imitation may be relatively unimportant at one stage, but crucial at another; it may be difficult to use in explaining the acquisition of grammatical structure, but it may be easier to use in explaining the acquisition of vocabulary". On the other hand, there is evidence that when children imitate spontaneously, they seem to do so as a strategy for learning new syntactic constructions (Bloom, Hood and Lightboun, 1974).

The importance of the sheer amount of linguistic

interaction available to the child has been shown by Nelson (1973). The more adult speech a child hears, the faster will he develop in language skills. The more often a child was taken on outings, the faster was his or her language development. The more time spent watching television, the slower was his or her language development. Hence, it does seem that active interaction with people and the world facilitates early language development.

It is now evident from the foregoing rationale that there is a growing insistence on the significance of taking into consideration, in the study of language acquisition, the social context. This is in accordance with the also-growing interest in emphasizing the social context in language description which has been discussed in the last chapter. It has been indicated that the child acquires not only a linguistic competence but also, through the process of socialization, a cultural competence. The two types of competence are incorporated in the so-called "communicative competence". This competence is reflected in the fact that the child acquires, throughout the process of language acquisition and socialization, the functions language serves in his life. Halliday (1974), who identifies seven functions of language in the child's life, stresses that the language functions for the child are different from those for adults. The language functions for adults in Halliday's view have been mentioned in the previous chapter.

To sum up, although behaviourism failed to account for language acquisition satisfactorily, it does not follow that behaviourism has no usefulness in S-R models of language behaviour. Many of the situations of everyday life are recurrent and easily identified, and in many of these situations particular utterances (of the kind that are described as stereotyped) are more or less mandatory. There is a limited set of utterances from which we will choose when we greet our friends on first seeing them in the morning, and so on. Much of this language behaviour is reasonably described as being under the control of prior behavioural or environmental stimuli (Lyons, 1977: 135-6).

In other words, it is important to give due recognition to both types of utterances in the description of language behaviour, i.e. stimulus-bound utterances and stimulus-free utterances. We should also bear in mind that ^{utterances} are not necessarily either wholly stimulus-free or wholly stimulus-bound. For instance, if someone is asked a question, he will normally react by providing an answer. What form his utterance takes may be undetermined, or stimulus-free, in the sense that the words chosen and the way in which they are combined could not be predicted from the form of the question or the context in which it is asked, but it may be determined, or stimulus-bound, to the extent that it will have a certain grammatical structure characteristic of

utterances which will serve appropriately as answers to questions of such and such a form, and it may be uttered in a certain tone of voice or style which is not only appropriate to, but determined by, the situation and the roles and status of the participants.

Reinforcement or conditioning, on the other hand, is not only normal, but a necessary element in the process of language-acquisition. It might very well be the case that children start using language by associating particular words or utterances with specific objects and situations as conditioned or reinforced responses to stimuli. The conditioning of responses may be but one component of a complex process; and one which, though essential, presupposes for its function other different cognitive mechanisms.

Behaviourism has also the merit of emphasizing the fact that in speaking a language we are engaging in a certain type of social behaviour, and this, in turn, can help us to free ourselves of the traditional view of language as nothing more than an instrument for the communication of thought.

In short, the behaviourist theory of language may yet prove viable, if it is coupled with the acceptance of a richer set of innate and species-specific propensities for cognitive development, maturing with age in the interaction of the organism with its environment (Lyons, 1977: 137).

It follows then from this argument that word associations of young children may be explained satisfactorily in terms of S-R theory. But with adults' associations we have to find out some other explanations which can account for the developmental changes which take place in associations such as the syntagmatic-paradigmatic shift. Some of these explanations, as will be seen later, may be the internalization of the hierarchical structure of language and the internalization of language functions as a means of categorization and classification.

5.7 Language Acquisition and Word Associations

5.7.1 Word Associations as a Technique for Language Acquisition Study

One approach to the study of language behaviour of very young children has been to record lengthy samples of speech. Then the child's use of vocabulary, grammatical structures, and so on, is deduced from the corpus. An alternate approach is to get a small sample of language, via word association techniques, but to sample many children. Brown and Berko (1960), Ervin (1961), Entwisle, Forsyth and Muriss (1964), Entwisle (1966) used that alternate approach.

The validity of word associations of children as

indicators of linguistic development has only recently been established. One might inquire why children's word associations indicate their stage of linguistic development. If a child responds (Entwisle, 1966: 6) 'car' or 'moon' to 'slow', what evidence is this that he even knows the meanings of these words? Actually there are very few associations, even those of five-year-olds, that fail to have a strong semantic or syntactic relation to the stimulus. The examples of 'car' or 'moon' in response for 'slow' are typical responses of young children (5 years old). Consistent responses of a different kind, for instance 'fast' and 'quick' to 'slow', become very common by age eight. A clear change has intervened. Somehow children between the ages of five and eight come to understand the substitution privileges of adjectives. This does not mean that children can define the word 'adjective', or necessarily even have any notion of the existence of parts of speech. Rather they seem to have built a new classification system for words based on usage of those words in context.

The implication of this is that word associations tend to reveal the formation of word classes or concepts and so they forecast the individual's potential ability to emit different combinations of words from those he has heard. They provide indirect evidence of knowledge of 'rules' that make possible the generation of new, but permissible combinations of words. Entwisle's data (1966)

suggest that the child first learns what-follows-what (the phase of syntagmatic responding), and then what-substitutes-for-what (the phase of paradigmatic responding). Form class comprehension is observed long before 'parts of speech' are studied in school.

There are also correlations that exist between associations and usage. As Horn (1926) reported, kindergarten children use three to four times as many nouns in speech as college freshmen. This is paralleled by a preponderance of nouns in the associations of young children four and five, and many fewer noun responses (except to noun stimuli) in college age adults.

5.7.2 The Syntagmatic-Paradigmatic Shift

Entwisle (1966: 3) reports that the chief finding of her study is that paradigmatic responses increase over the years of middle childhood but at different rates. There is a surprising orderliness even in four-year-olds' associations, and this orderliness continues to increase up to age eleven.

The movement, in children, from the syntagmatic to paradigmatic responses is conventionally known as the syntagmatic-paradigmatic (S-P) shift. Entwisle et al. (1964) concluded that the S-P shift in children's associations occurs between age 5 - 10 and confirmed the previous studies by Brown and Berko (1960) and Ervin (1961). Moreover, they compared their findings with the findings

of Woodrow and Lowell of 1916 and came to the important conclusion that "there has been a marked change in associative responses of children over the past 50 years. The age patterns present in our data suggest that the developmental sequence of word associations has been considerably accelerated, perhaps by 4 to 5 years" (p. 25). They found that the S-P shift in Woodrow and Lowell's sample occurred between 9 and 12.

These findings point to cultural rather than educational factors as being important, for these remarkable changes occur in children mainly prior to school entrance or before formal language instruction in school. The implication of this is that the cultural factors should be taken into consideration in the study of language acquisition on the one hand, and in the analysis of word associations on the other.

Entwisle (1966: 115) also compared her data with that of Woodrow and Lowell. She found that verb responses are much more frequent in the Woodrow and Lowell sample, and the percentages of verb responses exceed those found even with five-year-old modern children. In Entwisle's data, verb responses to nouns and adjectives decrease sharply with age over the first- to fifth-grade range. Adjectival responses increase with age in modern data.

One explanation, in Entwisle's view, for the presence of so many verb responses on the Woodrow and

Lowell data may be that fifty years ago children heard more speech from other children and less adult speech than now. Average family size has declined in this interval and on television and radio adult speakers predominate. A socially determined learning condition of great importance may be the availability of adults for conversation.

One of the important characteristics of Entwisle's study (1966) is that it reported some of the variables that influence children's word associations such as: intelligence, sex, and socioeconomic status.

As regards the nature of S-P shift, the implication has been that this shift affects all words and occurs some time after school entrance. Entwisle (1966: 120-1) suggests that only a small portion of the vocabulary may evolve through this pattern at any particular age, and perhaps the description of the shift has been oversimplified.

In particular, the timing of the shift may be more a function of the particular words used than has been realized. The potential for producing syntactic responses seems to vary greatly from word to word, even within the same form class. This may be partly a function of the number of different usages and meanings a word has.

Another important fact is the unmistakable displacement by age of the paradigmatic shift depending

upon the form class of stimulus word. The following table (adapted from Entwisle, 1966: 59) shows that (per cent):

Table 4: Displacement by age of the paradigmatic shift depending on the form class of the stimulus words

Stimulus-word class	Kinder- garten	1st grade	3rd grade	5th grade	College
Nouns	61.2	62.7	72.9	81.0	77.1
Adjectives	16.8	31.7	70.6	55.6	65.8
Verbs	16.6	20.4	47.5	56.1	60.0

A third fact is the asymmetries in response. Adverbs often yield adjectives as responses, but the reverse is seldom true. The number of adjectival responses to nouns increases, even though the total number of syntagmatic responses decreases from first to fifth grade, and in particular the number of verb responses to nouns decreases.

A final and a very important fact is that syntagmatic responses of young children differ in kind from those of adults, with children's reflecting grammatical pairings (noun-verb), and adults' reflecting semantic refinement (adjective-nouns or combinations of words that signal newly acquired meanings).

5.7.3 Interpretation of S-P Shift

The question that arises now is: how can we account for the occurrence of this shift?

a) Ervin (1961) proposed the hypothesis of 'erroneous anticipation' to account for the dominance of paradigmatic responses within the framework of behaviourist theory of word associations. Contiguities will occur when the listener's anticipations are wrong. The strength of any paradigmatic response will depend upon the number of times it has been erroneously anticipated for its stimulus. Supposing the frame 'I can see the ...' the continuation might be 'man', 'boy', 'bird', 'difference', 'heel', etc. If the sentence begins with 'I can see the smiling ...' one might add 'person' or 'child', but 'difference' or 'heel' would no longer be possible. Thus 'anticipation' can be analyzed into two components: on the one hand, there are the probabilistic relationships by which preceding sentence elements lead up to the point in question (Markov model); on the other, there are grammar rules according to which a selection has to be made.

McNeill (1963) supported Ervin's erroneous anticipation.

b) Another explanation can be seen within the theory of mediation. Jenkins (1965) argues as follows. Let us assume a child repeatedly encounters two different words in the same context, e.g. A-B-C-X-D and A-B-C-Y-D.

This should lead first of all to syntagmatic connections: C should elicit X and Y, and X as well as Y should elicit D. If these sequences are repeated often enough and if other contexts are available in which X and Y play similar roles, then X and Y (resulting from the common mediating links C and D) should become members of the same class and should thus have the capacity to elicit one another. If X still evokes D in the child, in the adult X would elicit Y.

c) The third interpretation is given by McNeill (1966) who gave up the 'erroneous anticipation hypothesis' and adopted a view based on the notion of 'semantic features'. This view is the first attempt to explain word associations within the theory of generative grammar.

McNeill begins with the assumption of Katz and Fodor (1963) that when one knows the contents of a distribution class, one actually knows a set of features.

Cross-classification requires that words be kept on lists. Not only is 'man' a noun, it is an animate noun, not only is it an animate noun, it is a human animate noun, and so on down to a list that probably contains only man and woman. Some of these lists are clearly syntactic (the list of nouns for example) while others also appear to involve a principle of semantic classification (for example the list of human animate nouns).

It has been concluded that it is more efficient (Katz and Fodor, 1963) to represent the fact that words can be classified in numerous ways by assigning lists

of features to words rather than by assigning words to lists. Thus rather than belonging on the list of nouns, the sub-list of animate nouns, the sub-sub-list of human animate nouns, etc., 'man' would have associated with it a list feature such as 'noun, animate, human, male, etc.'. Again, some of these features are syntactic, others are semantic, all are members of the list of features attached to 'man'.

In the light of this, it can be said that children under seven give few paradigmatics because they have incomplete knowledge of the featural properties of words. It is probable that the additions still being made at age 6 and 7 are purely semantic features such as human, animate, and the like.

This hypothesis can be carried further by taking into consideration some findings by Deese (1964). He found that adult paradigmatics often resolve into bipolar contrasts, generally with just one contrast per stimulus-response pair. Deese (1962) has also argued that similar schemata can be applied to noun. From a featural point of view, the members of such antonymous pairs (active-passive, first-last) have identical features (Katz and Fodor, 1963). The one feature on which they differ, presumably, is related to the bipolar contrast that comes out in Deese's factor analysis. The most frequent paradigmatic response tends to be a word with the maximum number of features in common with the stimulus. The

paradigmatic response thus forms a 'minimal contrast' with the stimulus.

If children do not know all the features of a word, they will be unlikely to give the same response as an adult, even though they possess the same grammatical rules. The number of features attached to a word determines the size of the set of words with which it minimally contrasts. With fewer features a child's response will come from a larger set of words. If children do not know a sizable number of a word's features, the set of words that minimally contrast with the stimulus may be so large as to include words in different grammatical classes. In this case, some of the responses could be syntagmatic. Consider, for example, a walk - to walk; a dance - to jump; a high - to shout. All are syntagmatics given by 6 and 7 years old. It is conceivable that to a child with incomplete featural specifications of these words, such is a minimally contrasting pair. The contrast would be a major grammatical class. Under this interpretation, children's syntagmatics differ from adults' paradigmatics only in the number of features involved in the contrast. In fact, these children responses are 'pseudo-syntagmatic'. The children are working with distribution classes that are larger than the classes of the adults' grammar.

Thus the final account for the paradigmatic shift: it results from adding sufficient numbers of features so that the minimal contrast for any word will always be

within the boundaries of the word's major grammatical class.

As will be seen later, this 'minimal contrast' rule constitutes only one of the several rules that have been formulated by Clark (1972) within the generative tradition.

On the other hand, this 'semantic feature' hypothesis is in accordance with the findings of recent research on semantic memory (see Herriot, 1974, for a review).

d) Another plausible interpretation is the argument that the semantic organization of concrete nouns and verbs frequent in the child's early language can account for the S-P shift (Huttenlocher and Lui, 1979).

Nouns which encode object categories and verbs which encode categories of actions and states of objects are typically acquired in direct relation to objects and events, rather than through verbal context or direct definition. Thus they form a basic vocabulary in terms of which later word meanings are acquired. They also continue to be of high frequency throughout life.

It is known that concrete nouns and verbs encode different sorts of meanings and their semantic organization would seem to differ (Kintsch, 1972; Miller and Johnson-Laird, 1976).

Nouns fall into closely related and hierarchically organized domains. Some nouns such as: 'man, tree,

'apple' define classes in terms of their own inherent perceptual properties. Other nouns, in contrast, such as: 'doctor, teacher, and uncle' select sets of people; they do not encode categories which are based on the inherent attributes of people as types of objects like 'man or girl', but rather on social roles, habitual actions, or relations within a genealogical structure.

The object categories encoded in concrete nouns have a characteristic organization. They tend to fall into multilevel hierarchies such that the elements of meaning which are contained in the categories at one level are also contained in the categories at each lower, as in the categories animal, mammal, dog, collie.

Verbs, on the other hand, do not exhibit a hierarchical organization like concrete nouns. Miller and Johnson-Laird (1976) have pointed out that while verbs form "semantic fields" such as "travel, possession, vision" according to common elements of meaning, the verbs within a semantic field form various subgroups based on other important elements of meaning. For example, within the field of travel, the constituent verbs form subgroups based on direction (e.g. soar v. exit), presence of implied instrument (e.g. float v. sail), intent (e.g. chase v. wander), manner (e.g. run v. stroll), etc. These other elements of meaning form separate organizing principles which cross-cut the various semantic fields. Thus, the ratio of features a verb shares with other verbs within

its field in relation to the features it shares with verbs from other fields is not as large as it is for concrete nouns. In short, certain important features of verb meaning (semantic field, manner, intention, and number and type of arguments) are relatively uncorrelated, resulting in a matrix-like organization of unordered meaning elements.

Another difference in the semantic organization between nouns and verbs is that while concrete nouns encode categories of objects which exist independently of their actions and relations, verbs encode categories of action and states which require objects. In this sense, verbs may be said to encode conceptually dependent categories. For example, the act of "eating" involves an animate creature and an ingestible substance in a particular relation. Even though notions of objects may be closely associated with notions of their characteristic actions, they are not conceptually dependent on those actions. For instance, the notion of "apple" is no doubt closely related to that of eating, but an apple is a particular type of object independent of acts of eating.

Moreover, concrete nouns have many connections to other nouns within the same domain, whereas verbs, in contrast, have connections to their arguments and to verbs in other semantic fields.

Given these suggestions about the semantic organization of nouns and verbs, the syntagmatic responses can be understood. Syntagmatic responses to verbs

occur because related verbs are not accessed. The S-P shift could only occur as the field of meaning accessed by a verb becomes broad enough to include verbs of similar meaning. When a verb is presented to an adult, a variety of different sorts of meanings would become accessible, including noun arguments and various other verbs. Thus, the proportion of paradigmatic responses to verbs should be smaller than to nouns, and indeed it is.

Free association to verbs are slower than to nouns in adults (Glanzer, 1962), consistent with the hypothesis that the subject is choosing among a larger set of potential responses for verbs than for nouns.

The fact that S-P shift in children begins with nouns can also be understood in the light of the semantic organization of nouns and their functions in early language. This is also supported by recent research on language acquisition. Concrete noun meanings are acquired earlier than verb meanings in both receptive and productive vocabulary (Godlin-Meadow, Seligman and Gelman, 1976).

CHAPTER VI

COGNITIVE DEVELOPMENT AND ITS RELATIONSHIP TO LINGUISTIC DEVELOPMENT

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CHAPTER VI

COGNITIVE DEVELOPMENT AND ITS RELATIONSHIP TO LINGUISTIC DEVELOPMENT

6.1 Cognitive Development

6.1.1 Criteria of a Theory of Cognitive Growth

A theory of cognitive growth, in Bruner's view, must satisfy four criteria (Bruner, 1974a: 316):

a) It must characterize the operations of mind in some formal and precise fashion. Such a theory cannot, for example, ignore the basic logical categories in terms of which epistemology, logic, and the fundamentals of mathematics are concerned. We owe much to Piaget (1957) in this respect. Thus, a brief review of Piaget's theory of cognitive development is necessary.

According to Piaget (Inhelder, 1962) the development of knowledge is the result of a process of elaboration based essentially on the child's activity. In effect, two types of activity can be distinguished: firstly, a logico-mathematical type of activity, the activity in bringing together, of dissociating, or ordering, of counting, and so on - any activity for which objects are no more than a support; and secondly, an activity of a physical type, an activity of exploration aimed at extracting information from objects themselves, such as their colours, form, weight and so on. It is thus in

acting upon the external world that the child elaborates a more adequate knowledge of reality. His modes of knowledge are determined by the successive forms of his activity in the course of his development. Hence Piaget classifies cognitive development into several stages and shows how each stage reveals a progressive sequence from simpler to more complex levels of organization.

Piaget identifies five stages (Beard, 1974):

(1) The sensorimotor stage (0-2 years) in which the infant acquires motor skills in response to environmental stimuli but is not able to represent the world internally in any way.

(2) The pre-operational thought stage (2-4) in which a cognitive advancement of crucial importance takes place, i.e. the development of symbolic functioning, the ability to differentiate signifiers (words, images) from signifi-cates (those objects or events that signifiers refer to).

(3) The intuitive stage (4-7) in which the child's thinking is characterized by immediate perceptions and experiences, rather than by mental operations.

(4) The concrete operations stage (7-11) in which children begin to think and reason logically about objects in the environment and mentally perform actions that previously had to be carried out in actuality.

(5) The formal operations stage (11-15) in which adolescents are able to form abstract symbolic relationships.

b) It must take account of the natural ways of thought, the ones that seem ordinary or intuitively obvious. We must also bear in mind that much of thinking is carried out with culturally invented instruments, and that what is artificial before one has mastered the use of a tool may be nothing of the sort once the tool has become our servant. It was Pavlov (1929) who recognized and Vygotsky (1962) who exploited the distinction between classical conditioning prior to the growth of symbolic function and thought after the intrusion of the so-called second signal system. For what is natural after one has come to use a particular tool is determined as much more by the tool as by the user; this is true for language users as for users of other tools. Thus, it is also necessary to review briefly Vygotsky's view.

Vygotsky (1962) adopts the view that language and thought have principally independent origins and during the course of development they combine and intertwine. Although each undergoes further reinforcement, they can no longer be separated except in the abstract.

While Piaget believes that language enables the child to communicate thought and feelings to others, Vygotsky takes an opposite view, maintaining that language governs one's cognitive behaviour and responses to the environment.

The central theme in Vygotsky's writings is the development of silent inner speech, the process

whereby out-loud or external speech goes underground and becomes internalized as thought processes. The pre-school's egocentric speech is an important development towards the internalization of inner speech. While Piaget maintains that egocentric speech is basically no more than "thinking out loud" and usually not directed towards anyone in particular, Vygotsky gives evidence that it serves as a form of self-guidance and can assist the child in problem-solving situations. Helms and Turner (1976) give further supporting evidence.

It is worthy of note that Vygotsky holds the view that all speech is social in intent inasmuch as it is intended as a form of conduct with others, but is not necessarily communicative. He proposes that the direction of speech is from social to egocentric rather than the other way. Egocentric speech, in his view, arises when the child starts conversing with himself. While Piaget regards egocentrism as a transitional stage between autistic and logical thinking, Vygotsky believes that internal speech, which is egocentric in character, serves both autistic and logical functions.

This leads us to another important difference between Piaget and Vygotsky. Piaget believes that social factors have no important influence on the growth of cognition. Vygotsky, in contrast, maintains that mental activities are conditioned from the beginning by social relationships.

c) The nature of the culture in which a human being grows must be taken into account. For a culture is, among other things, a system of techniques for giving shape and power to human capacities. The values, tools, and ways of knowing of a culture equip its members. This does not imply exaggeration of the cultural differences and overlooking the many deep universals both in human nature and in all cultures.

d) It must take into account man's primate ancestry and consider the manner in which the evolution of primates and of man imposes a pattern on his growth. Perceptually, intellectually, emotionally, man is very much a primate.

Bruner's theory has certain advantages for: First, it is comprehensive in the sense that it takes into consideration all criteria of cognitive growth mentioned above.

Second, it incorporates other theories of cognitive growth, e.g. Piaget's and Vygotsky's.

Third, and most important, it stresses the crucial influence of culture on cognitive development, which is in accordance with the researcher's view on word associations.

6.1.2 Bruner's Theory of Cognitive Growth

A key concept in Bruner's theory is the "system

of representation": a set of rules in terms of which one conserves one's encounters with events. During his cognitive development, an individual passes through three kinds of representational systems (Bruner, 1974a):

(i) "Enactive" in which the child gains knowledge of the world through motor actions and responses. Bruner states that infants become increasingly able to refine their motor abilities and become more aware of environmental details. For example, reality is conferred upon objects in the environment only through the child's interaction with them.

(ii) "Iconic" which involves the use of images to summarize and represent actions. Thus, it is closely linked to perception. The child notices and stores the visible or "surface features" of objects and uses these characteristics as a basis for dealing with them representationally. If iconic representation and imagery is the principal cognitive tool of young children, then those who are high in the ability to use images should also show relatively superior school performance.

(iii) "Symbolic" is the most advanced form of cognitive development. The child is able to transfer iconic images into language and to make logical derivations. The child is bound neither by the temporal, social features of enactive representation. Rather, the child develops an increasing capacity to deal with several alternatives simultaneously, to attend to several sequences during the same period of time, and to allocate time and attention

in a manner appropriate to these multiple demands.

Bruner stresses that the interaction of these three systems is central to growth. Growth involves not a series of stages, but rather, a successive mastering of three forms of representation along with their partial translation each into the other.

The influence of culture on cognitive development is crucial in Bruner's theory. In his view:

a) The technologies that a culture provides through language, myth, and explanations, metrical and reckoning systems, tools, and its disciplines of knowledge, all reinforce, amplify and enrich human representational capacities (Bruner, 1974a: 318).

b) Like the growth of technology, the growth of intellect is not something monotonic. Rather it moves forward in spurts as innovations are adopted. Most of the innovations are transmitted to the child in some prototypic form by agents of the culture: ways of responding, ways of looking and imagining and most important, ways of translating what one has encountered into language (1974b: 348).

c) What is significant about the growth of mind in the child is to what degree it depends not upon capacity but upon the unlocking of capacity by techniques that come from exposure to the specialized environment of culture (1974b: 350).

Thus Bruner believes that cultural variation yields variation in modes of thought (Greenfield and Bruner, 1974: 369) since intelligence is, to a great

extent, the internalization of tools by a given culture. Bruner explicitly asks: What does it mean intellectually to grow up in one cultural milieu and not another? What kinds of cultural differences make an intellectual difference at what points in development and how does it come about in some particular way?

6.1.3 Role of Value Orientation, Language and Schooling on Cognitive Development

To answer these questions he reviewed extensive experimental research in three areas: value orientation, language and schooling.

(A) Value Orientation:

Two types of orientation are distinguished in contrast to each other: collective and individualistic. "A collective, rather than individual, value orientation develops where the individual lacks power over the physical world. Lacking personal power, he has no notion of personal importance. In terms of his cognitive categories, he will be less likely to set himself apart from others and the physical world, he will be less self-conscious at the same time that he places less value on himself. Thus, mastery over the physical world and individualistic self-consciousness will appear together in a culture, in contrast to a collective orientation and

a realistic world view in which people's attitudes and actions are not placed in separate conceptual pigeonholes from physical events." (Greenfield et al., 1974: 376).

Comparison between American children who grow up in an individualistic orientation and Eskimo who grow up in a collective orientation, showed the influence of this cultural orientation upon cognition. Experiments in the USA showed that children as they grow older form groups increasingly by the rule of superordinate grouping (those things go together that share a common attribute). The earlier pattern is more complex in the sense that things go together because they fit into a story together or what not. The transition from the earlier to the later mode of grouping is handled by egocentrism. Things are alike by virtue of the relationship that I or you have to them, or the action taken towards them by me or you.

Using parallel techniques with Eskimo children showed that they do not express the function of things in terms of personal interaction with them nearly so often as do the American children of European descent. The Eskimo value system stresses self-reliance, but strongly suppresses any expression of individualism as an attitude towards life. The Eskimos are a subsistence culture that requires group action in its major forms of activity - sealing, caribou hunting, stone weir fishing. Eskimo children develop their superordinate structures

without the intervention of the kind of egocentrism observed in European children. Thus, such egocentrism cannot be a universal stage, not even in the development of superordination. Instead, it appears clearly relative to cultural conditions and values.

(B) Language:

Bruner makes the important point that it is the structure of the lexicon and not simply its list of items that is crucial. Most of the experiments on S-W hypothesis deal with the vocabulary of any one language at a single level of generality - its words rather than any structural relation among them. More important is the number of levels of generality that can be encoded by the lexicon of a given language for a particular domain and its relation to concept formation. Hence, Bruner reports on the role of superordinate words in conceptual thought.

The Wolof language, in contrast to French (and to English), has neither the word "colour" nor the word "shape". Evidence proved that the lack of the word "colour" does not hinder colour grouping from being formed. But does the absence of the general word mean that the Wolofs have no general concept of colour? If not, is there much consequence in this deficit? Results indicate that there is a significant association between use of superordinate words like "colour" and "shape" and the

number of different types of attribute used for grouping. This relationship also holds when all other factors such as knowledge of French and school grade are held constant. Thus, if a Wolof child uses a superordinate word, his chances of grouping by a variety of attributes are twice as great as those of a child who utilizes no superordinate vocabulary. It should be remembered that when a Wolof child uses the word "colour", it is a French word that he is introducing into a Wolof linguistic context (p. 385).

(C) Schooling:

School is operating on grouping operations (such as superordination) through the training embodied in the written language. The written language, as Vygotsky (1962) points out, provides an occasion in which one must deploy language out of the immediate context of reference. Writing forces a remoteness of reference on the language user. Consequently, he cannot use simple pointing as an aid, nor can he count on labelling that depends on the present context to make clear what his label refers to. Writing, then, is training in the use of linguistic contexts that are independent of the immediate referents. Thus, the embedding of a label in a sentence structure indicates that it is less tied to its situational context and more related to its linguistic context.

Experimental evidence shows that it is always

the schooling variable that makes qualitative differences in directions of growth. Wolof children who have been to school are more different intellectually from unschooled children living in the same bush village than they are from city children in the same country or from Mexico city, Alaska or Massachusetts. It is the fact of being a written language that makes French such a powerful factor in the cognitive growth of the Wolof children (p. 385).

In conclusion, Bruner states that his results move away from the strong parallelism of Whorf towards a sort of instrumentalism that is typical of Vygotsky (1962) and which reflects interaction between language and thought.

6.2 The Relationship Between Cognitive Development and Linguistic Development

The growing recent research on the role of cognitive development in language acquisition has led to the conclusion directly opposite to the S-W hypothesis. There is now enough evidence for the role played by conceptual development in language acquisition (Clark, 1973; Chapman and Miller, 1975; Rosch, 1976). But there is also strong evidence that conceptual development is insufficient in itself to explain language acquisition (Cromer, 1974;

McCawly, 1974; Dore, 1975, 1974; Leonard, 1975).

Moreover, despite the ample evidence that cognitive development can proceed independent of language, there is also evidence that language interacts at points with conceptual growth in ways that are not predicted by the hypothesis that language is acquired to express only what the child already knows. For example, Blank (1974, 1975) observes that the cognition-precedes-language hypothesis has grown out of research that emphasizes the nonlinguistic achievements of the sensorimotor period of development described by Piaget. On the other hand, Bloom (1973), Bowerman (1976) and Schlesinger (1977) observed that there is an important distinction between the child's having achieved a general nonlinguistic grasp of his environment - an ability to interpret events on the sensorimotor level - and his having formulated the kinds of categories that are required for language.

Having reviewed the literature, Schlesinger (1977: 155) concludes that although the child learns "to interpret what is going on in his environment" without any help from language, "language learning depends, in addition, on a categorization of objects and events, which is needed solely for the purpose of speaking and understanding speech". In other words, "the categorization problem cannot be dealt with independently of language: its solution (by the child) is part and parcel of the language learning process".

Hence, recognition that language can influence the young child's concept formation need not entail a return to the strong linguistic determinism of the Sapir-Whorf hypothesis:

First, as Schlesinger (1977) notes, the child may have to attain a certain concept by noticing how things are treated linguistically.

Second, it is becoming increasingly clear that man's cognitive organization is not infinitely malleable. Human beings have characteristic ways of organizing certain experiences regardless of language, and linguistic categories respect these conceptual constraints (Rosch, 1974). For such categories language may not introduce the core meanings themselves but only serve to specify where the category boundaries fall (Schlesinger, 1977).

Finally, a third difference between the claims of linguistic determinism and the present more moderate "interactionist" hypothesis is that the latter, unlike the former, is neutral with regard to the question of whether categories that are formed purely to meet the requirements of language in fact have an effect on the child's general cognitive or nonlinguistic way of interpreting and dealing with his environment (Bowerman, 1978). The possibility that such influences occur, however, cannot be ruled out on the basis of our present knowledge (Blank, 1974; Bowerman, 1976; Schlesinger, 1977).

6.3 Cognitive Development and Word Associations

It has been stated that intelligence is, to a great extent, the internalization of tools in a culture. It follows then that differences between cultures, in the quality and quantity of tools available and in the ways of internalizing them, should yield differences in modes of thought between these cultures. For example, from the point of view of value orientation, a collective orientation does not arise simply as a by-product of individual powerlessness, but it is systematically encouraged as a sociolinguistic progress. Western societies, such as the English, recognize individual intention and desire as a positive formation of age. Other societies, such as the Egyptian, do the reverse. Hence, adult members of a family interpret and evaluate the child's motor activities either in terms of the relation of these activities to the people around him or in terms of motor competence per se depending upon the culture to which they belong.

Different cultures will also provide different opportunities and contexts for using and practising language functions through the agents of culture. This, in turn, will either delay or accelerate the internalization of language, as a symbolic system, and its cognitive effects.

Also, individuals who are exposed to a better system of schooling - which is usually linked with better

agents of culture - will show a higher level of cognitive maturity because they enjoy better opportunities for experiencing context-independent-modes of thinking.

It is possible that these differences between cultures may account for the differences in word associations of different cultures from the cognitive perspective. So, the question now is: how can we account for the phenomenon of word associations from the cognitive point of view? How can we, for instance, account for the occurrence of the S-P shift cognitively?

It has been indicated in the last chapter that the S-P shift monitors a cognitive element and that the shift occurs between the age of five and ten. Is there any significant cognitive development during this period in the individual that may contribute to this occurrence?

As children mature, they use indirect information based on forms of information processing other than the ostensive identification of objects actually present. They seem to make reference to states and constraints that are not given by the immediate situation. In other words, they go beyond the information given. They cumulate information into a structure that can be operated upon by rules that transcend simple association by similarity and contiguity.

This cognitive development is reflected in the development of three types of grouping as children grow up (Bruner and Olver, 1974):

(i) Perceptual: has to do with the perceptual features and attributes of objects (colour, size, shape, pattern, etc.).

(ii) Arbitrary functional: What I can do with the objects regardless of their usual use (you can make a noise with a newspaper).

(iii) Appropriate functional: has to do with the usual use and function of objects (potato, peach, bread are characterised: you can eat them).

In other words, cognitive growth brings a decline in the apparent qualities of objects as a basis for grouping and an increase in the use of functional basis for grouping. Language plays a crucial role in this development. As Bruner (1974b: 344) explicitly put it: "Hierarchical classification is ... one of the most evident properties of the structure of language-hierarchical grouping that goes beyond mere perceptual inclusion ... As language becomes more internalized, more guiding as a set of rules for organizing events, there is a shift from the associative principles that operate in classical perceptual organization to the increasingly abstract rules for grouping events by the principles of inclusion, exclusion, and overlap, the most basic characteristics of any hierarchical system."

Examination of word associations of young children shows this development. Their associations are dominated by "perceptual features". For example, their

responses to a stimulus such as "book" include "red, big, new", to "ball" include "round, big, red". As they grow older they move towards the arbitrary then the appropriate functional features. Thus to "book" and "ball" they respond with "read, magazine, story" and "play, match, football" respectively. This, in the researcher's opinion, implies that the S-P shift is cognitive rather than linguistic in nature. This shift is, once again, reflected in the systematic cognitive development in the child.

By age three the child is still dominated by the interdependence of action and percept, response-produced stimulus strategies. By age five, the child's choice is controlled by the patterns before him, but one pattern at a time, and he is not able to embed the alternatives into hierarchical structure that is the essence of symbolic representation. By the age of eight, he is able to deal with information properly defined rather than simply in terms of single images. He can deal simultaneously with the patterns before him by dealing with their inclusion, exclusion, and overlap, in order to isolate distinctive features. By the age of nine, the child becomes master of the task using symbolic operations as a basis for dealing simultaneously with many alternative images.

This, then, shows clearly that there is a cognitive development concomitant with the S-P shift.

Specifically, the S-P shift occurs during the period of transition from the iconic to symbolic representation systems. One crucial factor in this transition is the internalization of language.

It follows then that the S-P shift may occur earlier in some cultures than others. But at the present time there is no cross-cultural evidence to verify this tentative suggestion.

CHAPTER VII

DATA ANALYSIS AND ITS PEDAGOGIC IMPLICATIONS AND IMPLEMENTATION

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CHAPTER VII

Before examining the data, it will be helpful to state briefly the theoretical position on which it is based.

7.1. The Theoretical Validity of Word Associations

I have argued that word associations can be a useful basis for the comparative study of cultures; that is, they can reveal those repetitive patterns which underly cultural and linguistic behaviour. These patterns, in turn, may reflect the people's world view and how they categorize experience. Moreover, word associations are capable of yielding significant information about the attitudes, beliefs, and cognitive structures of the cultures involved.

This is attributed to the underlying characteristics of associations. They can explore the contents of minds without these being expressed in the full discursive structure of language. Thus, they are free from the constraints of grammar imposed upon the structure of discourse. Moreover, being free from an overall plan of discourse, associations show a character of spontaneity which allows them to reveal aspects of the culture that could not be revealed if respondents had to spell out the associations obtained. This, in fact, is the significant value of associations: responses are given freely

by the respondents themselves, they are not preselected or arranged or constrained in any way by the experimenter (Szalay and Deese, 1978).

The contents of "the mind" seem to be a categorical grid imposed on reality, rendering some things equivalent and others nonequivalent. Since the cells of the grid are usually named, the design of the grid should be discoverable from inquiries about the meanings of words" (Brown, 1964: 251). This implies that the "categorical grid" differs from one culture to another. Consequently, the meanings of the words that name the cells may differ. The reason is that meanings of words are not "determined solely, or even principally, by the physical properties of their denotata. Much more important seems to be the role or function of the objects, properties, activities, processes and events in the life and culture of the society using the language" (Lyons, 1977: 210). What constitutes semantic equivalence between words from different languages is complex and controversial; it depends ultimately upon the "cultural equivalence" of objects, institutions and situations. Word associations, then, can throw light at the cultural equivalence of the objects, institutions and situations in a culture.

This leads us again to the notion of the "subjective meaning" of a culture. Subjective meaning, i.e. meaning as a subjective reaction, involves "the individuals'

actual understanding, perception, and evaluation, even though certain elements of this understanding are necessarily vague, ambiguous, and not readily communicable". Psychological aspects of the reactions individuals have to words and the concepts behind words are the substance of subjective meaning. Thus to learn something about the structure of subjective meaning we should conceive of a meaningful reaction as "the aggregate of component reactions and potential component reactions irrespective of their linguistic or logical status" (Szalay and Deese, 1978: 4).

Since word associations are reactions individuals give to words and the concepts behind them, it is evident that word associations can reveal aspects of that subjective meaning.

It can be argued further that "associative meaning" defined as "the distribution of associative responses to stimuli" is an abstraction of subjective meaning.

7.2. The Pedagogic Value of Word Associations

Associative meaning revealed in word associations is a kind of socially agreed upon meaning. If people do not possess meanings in common, they cannot, of course, communicate. We argue that common meaning in communication is to a considerable extent determined

by the existence of commonality of associative structures in different people. This is supported by empirical evidence.

In a comparison of French and English monolinguals and bilinguals, Lambert and Moore¹ (1966), show that the fidelity of communication both across and within language communities is limited by associative discordance between and within the communities. That is to say, fidelity of communication depends on how many associations people recognize in common regarding vocabulary items.

Moreover, Johnson² (1964) proved that commonality of associative structures are an essential part of the semantic competence of the individual. He showed the individual's capacity to organize his thought qualitatively on the basis of the structure of associations that he has developed. Johnson studied the associative structures for words defining key concepts in classical mechanics. His study revealed the importance of well developed associations: "as associations develop among concepts, they become part of an associative structure which is utilized in forming ideas about physical concepts".

It follows, then, from a pedagogic point of view

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1. Lambert, W.E. and Moore, N. (1966). Word-Association Responses: Comparison of American and French Monolinguals with Canadian Monolinguals and Bilinguals, Journal of Personality and Social Psychology, 3, 313-320.
 2. Johnson, P.E. (1964). Associative Meaning of Concepts in Physics, Journal of Educational Psychology, 55, 84-88.

that Egyptian learners of English should be able to recognize those associative structures underlying the sociolinguistic commonality that exists among native speakers of English. This can be achieved by programming the Egyptian learners' lexical associations more closely to match the native speakers'.

It has been indicated in Chapter II that word associations undergo two important processes:

(1) the shift, in children, from syntagmatic to paradigmatic associations. This shift indicates cognitive maturity.

(2) the shift from acoustic to semantic associations. It was indicated that encoding vocabulary in terms of its semantic associations is positively related to high-proficiency-level learners. Hence, from a pedagogic point of view, we should concentrate on the semantic content of associations. In this respect, we can make use of the semantic relations that word associations manifest such as: antonymy, synonymy, superordination, subordination, etc.

We have also come to the conclusion in Chapter IV that since (1) a foreign language should be taught in its own cultural context,

(2) word associations differ from one age group to another,

(3) word associations are culturally specific, and

(4) we should teach learners to encode approximately like native speakers of the foreign language,

it is essential to establish in the learners recognition of the semantic content of associations of the native speakers of the same age group.

An important inference from Chapters IV, V and VI is that language, culture and cognition are interdependent and interact with each other. This implies that word associations cannot be only a linguistic phenomenon, i.e. we cannot understand the underlying structure and organization of associations in terms of the internal structure of the language in which the associations are produced. We should see associations as a sociolinguistic phenomenon. This enables us to take into consideration the many sociolinguistic variables that operate on the individuals' cognition in producing word associations.

This has led to the suggestion of a three-dimensional approach to the analysis of my associative data: linguistic, cognitive and cultural.

7.3. General Points

Before discussing the analysis and its basis, the following points should be borne in mind:

(1) Two stimulus words were excluded from the test: "egg plant" and "mosque". These two words were not known to the majority of the English subjects.

(2) Although it has been decided that responses which fall in more than one form class will be classified as "syntagmatic", in many cases I depended on my sociolinguistic intuition to assign the response to a certain

form class. This process is present only in English since in Arabic every word has a clear-cut form class. Some examples are: "stop" in response to "bus" is likely to be a noun not a verb; "ring" in response to "bell" is a verb not a noun; "ring" in response to "round" is a noun not a verb.

(3) Homographs are one of the most frequent phenomena in English. In colloquial Arabic they are relatively rare. Hence, it is likely that the English subjects may give responses to the homographic stimuli which reflect this phenomenon. In the translation of such stimuli into Arabic, I was faced by the problem: which sense of the stimulus should be translated into Arabic? In Chapter II, I have statistically proved that word associations can be a reliable measure of semantic frequencies of different kinds including "homographs". The primary response to a homographic stimulus indicates the most frequent meaning of that stimulus. This "most frequent meaning" was translated into Arabic.

(4) In the translation of responses from Arabic to English I was also faced by the problem of "homographs". I also depended upon my sociolinguistic intuition. For example, in response to "science" the response "/rijaḍah/" means either "sports" or "mathematics". It is intuitively reasonable to assume that the meaning meant is "mathematics".

(5) The phenomenon of "homographs" implies that

some responses occur under the influence of the linguistic structure of each language and this may entail a sort of linguistic relativism. This should not be taken to imply the parallel conclusions made by the S-W hypothesis which has been validated.

(6) Since in English a word may be assigned to more than one form class, it was essential in the translation from Arabic to English to state after many responses their form class.

7.4. Data Analysis

It is my view that the complexity of relationships underlying the structure of word associations cannot be understood or accounted for from a single perspective alone. Thus I adopt a multidimensional approach to the analysis of word associations. This multidimensionality does not imply that the dimensions of the approach are independent of each other. As will be evident from the discussion below the dimensions are interdependent and complementary. This approach comprises three dimensions:

- (1) Linguistic,
- (2) Cognitive,
- and (3) Cultural.

7.4.1 The linguistic dimension

In the linguistic analysis of my associative data two linguistic approaches will be dealt with: Deese's (1965) and Clark's (1972). The reason is that they are the only available approaches in connection with word association analysis. Besides, Deese's approach is a structural one and deals with associations purely in terms of their syntactic structure. On the other hand, Clark's is a generative approach and deals with associations in terms of their semantic structure. Therefore, it is my view that the two approaches should be taken to be complementary to each other rather than standing in opposition.

(A) Deese's linguistic approach

Deese takes the point of departure that associative relations in a language have a structure, and that structure arises out of the same source as does the grammatical structure, namely, the uses of language.

The grammatical relations between stimuli and responses in free associations should be tackled in a special way. Both the stimuli and responses are single words, hence, the relations among them cannot be described, for example, by a phrase or a sentence structure of the language. Associative relations can be described only by the internal relationships among

associations. There are systematic and lawful relationships between the distributions of free associations and the grammatical classes of the words used as stimuli in free associations and those that occur as responses.

(Deese adopts a positional-equivalence notion of grammatical class based on Fries's theory (1952).

I am, however, not committed to this adoption.)

In my opinion "the internal relationships among associations" are not the only way of understanding associations. It will be shown in the discussion of the cultural dimension that it is important to take into consideration the cultural context, i.e. the extra-linguistic factors.

It has been mentioned above that word associations of adults are mainly paradigmatic. But it is important to bear in mind that the tendency towards paradigmatic or syntagmatic associations varies with form class. According to Deese nouns are overwhelmingly paradigmatic whereas verbs and adjectives are around 50%[^]

Nouns:

Nouns are paradigmatic irrespective of frequency of usage. My data confirm Deese's conclusion. Table 5 shows that 74.5% of the responses to the nouns in the English sample are nouns and 82.5% in the Egyptian sample.

Now the question is: why are nouns overwhelmingly paradigmatic?

Table 5: Distribution of responses to nouns

Form class of response	English		Arabic	
	Total No. of responses	%	Total No. of responses	%
<u>Paradigmatic</u>				
noun	51,341	74.5	52,046	82.5
<u>Syntagmatic</u>				
verb	4,627	6.7	1,564	2.4
adjective	4,688	6.8	9,398	14.9
<u>Ambiguous</u>	8,317	12.0	35	0.2
Total	68,973	100.0	63,043	100.0

Deese (1965: 109-110) argues as follows:

"Associative relations ... are much more likely to stem from paradigmatic portion of associative distributions than from the syntagmatic portion. The important point ... is the implication that it is from noun-noun relations that sentences are formed ... stimulus-response associative sequences with nouns as stimuli readily form sentences; 'man' is the opposite of 'woman', or, the 'chair' is beside the 'table' ... (an) ability of nouns to form sentences in which the associations occupy the predicate position."

"This character of nouns makes a strong case for the stimulus-equivalence model for the development of associations ... it is possible that adults have so thoroughly learned the grammatical (sentence position)

property of nouns that, without any intervening steps, nouns come to yield nouns."

This explanation is unsatisfactory for two reasons:

a) It implies that associations are formed according to the principle of contiguity: "the chair is beside the table" although Deese explicitly rejects this view and offers the principle or law of "grouping" (Deese, 1965).

b) Recent literature on language acquisition gives strong evidence against the stimulus-equivalence or the position-equivalence model for acquiring the grammatical structure of language.

More satisfactory is Halliday's explanation in his interesting study of the relationships between "Grammar, Society and the Noun" (1967).

Halliday argues that "nominality ... is, unlike many features of English, something of which there is a general 'cultural' awareness ... It is thus not only part of our cultural knowledge but also a determinant of cultural behaviour" (p. 7).

Among other things, nouns are used to name classes of objects; and with every advance in technology there are likely to be more classes of objects to be named.

The noun is the class of words that names classes of things; centrally, concrete objects and persons, but also abstractions, processes, relations,

states, and attributes: whatever a pronoun can stand for.

On the other hand, the lexicon of a language can be viewed at least partly as a set of taxonomies, or even perhaps as a single taxonomy. Sociolinguistic studies of folk taxonomies suggest that some taxonomic naming is a universal feature of the organization of lexis. It seems moreover that this form of organization is very early learnt by the child: as he masters the class-naming principle he also quickly understands that some classes include other classes: the class of spoons includes that of teaspoons, that of men includes that of uncles and so on. But the manifestation of this organization, and its relation to syntactic patterns, vary considerably among different languages.

Within language, nouns probably play the central part in building up the child's view of his environment. They name concrete objects, definable at one stage perhaps, experientially, as the class of "drop-pables", things which fall to the ground when released in the course of his experiments with gravity at the age of about one year, like teddy bear and sandwich.

In general, "we grow up in highly nominalized environment". A piece of evidence that supports this view comes from word associations themselves. It is known that, from the developmental point of view, word associations undergo certain changes. A shift from

syntagmatic to paradigmatic responses occurs around age nine (Entwistle et al., 1964). The shift does not only begin with nouns but also the paradigmatic responses to nouns increase remarkably. This phenomenon may be interpreted as the beginning of the child's awareness of the cultural significance of nouns and the beginning of the role of nouns as a determinant of cultural behaviour.

Whether the notion that nouns reflect a central cultural awareness and that we grow up in a highly nominalized environment is a universal feature cannot be dealt with here. But I can stress that this notion holds for Arabic as it does for English.

Adjectives:

The data also confirmed Deese's conclusion that the underlying structure of adjectives revealed in word associations is that of contrast. Most paradigmatic responses to adjectives in my data are either synonymous or antonymous.

Table 6 shows that the paradigmatic responses to adjectives in the English sample represent 61% of the total responses in contrast with 55.7% in the Egyptian sample.

It is also evident that 32.8% of the total responses to adjectives in the English sample are nouns whereas in the Egyptian sample nouns represent

Table 6: The distribution of responses to adjectives

Form class of responses	English		Arabic	
	No. of responses	%	No. of responses	%
<u>Paradigmatic:</u> adjective	4,963	61.0	4,523	57.7
<u>Syntagmatic:</u> noun	2,666	32.8	3,276	41.7
verb	155	1.9	54	0.6
<u>Ambiguous:</u>	347	4.3	-	-
Total	8,131	100.0	7,853	100.0

41.7%. This shows the contextual linguistic relationship between adjectives and nouns and also the dominance of nouns. It is worth mentioning that while in English adjectives precede nouns, in Arabic they follow nouns.

Verbs:

Deese (1965: 141-2) argues that verbs, which have some referential meaning, are semantically, if not grammatically, very much like nouns. Even grammatically there is, in Indo-European languages, a close relation between nouns and verbs, as is illustrated by the importance of gerundive constructions, and the readiness with which nouns may be formed from verb stems. Also, in English many words function as both nouns and verbs and this characteristic as will be seen from the data may account for the relatively low paradigmatic responses to verbs in contrast with nouns and adjectives.

Table 7: The distribution of responses to verbs

Form cases of responses		English		Arabic	
		No. of responses	%	No. of responses	%
<u>Paradigmatic:</u>	verb	4,188	32.5	5,329	41.6
<u>Syntagmatic:</u>	noun	5,070	39.4	6,811	53.3
	adjective	1,222	9.5	644	5.0
<u>Ambiguous;</u>		2,359	18.6	14	0.1
Total		12,839	100.0	12,798	100.0

Table 7 shows the associative distribution of responses to verbs. The paradigmatic responses represent 32.5% of the English responses and 41.6% of the Egyptian responses. According to the S-P shift, it might be tempting to interpret these figures as an indication of higher linguistic maturity for the Egyptian subjects. But taking into account the whole hierarchy distribution of responses, it will be clear that it is a false speculation. In fact, the low proportion of paradigmatic responses in the English sample may be accounted for by the fact that 18.6% of the English responses are ambiguous, i.e. may be allocated to more than one form class. This is supported by the fact that only 0.1% of the Egyptian responses are ambiguous. This, on the other hand, is a reflection of the grammatical structure of both English and Arabic.

I tried to find out some criterion according to which we can judge which verbs yield more paradigmatic or syntagmatic responses. The criterion of transitivity/intransitivity is not appropriate since most verbs may be both transitive and intransitive. (In the test 33 verbs are both transitive and intransitive, and 3 only are intransitive.)

I tested a classification of verbs based on a communicative criterion (Ryle, 1949; Austin, 1962; Markova, 1978). According to this classification, verbs may be dispositional or episodic in character.

Dispositional verbs are:

- a) cognitive such as: know and remember;
- b) verbs expressing feelings and emotions such as:
like, love, hate;
- c) verbs expressing physical properties such as:
dissolve and melt;
- d) verbs expressing habits and tendencies such as:
bring, play and drive.

Episodic verbs, on the other hand, are:

- a) performative such as: order, promise and thank;
- b) verbs in which disposition or ability is actualized
such as: buying and baking;
- c) verbs of motion such as: go and throw;
- d) verbs expressing exchange of property such as:
take, give and borrow;
- e) achievement verbs such as: succeed, fail, make up,
arrive.

Table 8: Responses to verbs according to their classification into dispositional and episodic

English

Dispositional			Episodic		
Form class of response		%	Form class of response		%
<u>Paradigmatic:</u>	verb	26.9	<u>Paradigmatic:</u>	verb	40.4
<u>Syntagmatic:</u>	noun	47.6	<u>Syntagmatic:</u>	noun	31.8
	adjective	10.2		adjective	9.1
<u>Ambiguous</u>		15.3	<u>Ambiguous</u>		18.7

Arabic

Dispositional			Episodic		
Form class of response		%	Form class of response		%
<u>Paradigmatic:</u>	verb	44.9	<u>Paradigmatic:</u>	verb	43.8
<u>Syntagmatic:</u>	noun	52.0	<u>Syntagmatic:</u>	noun	52.1
	adjective	3.1		adjective	4.1
<u>Ambiguous</u>		-	<u>Ambiguous</u>		-

Table 8 shows the distribution of responses according to this classification for both English and Arabic. The table shows that in the English sample, paradigmatic responses to episodic verbs are remarkably higher than those to dispositional verbs. In Arabic, in contrast, the pattern is different. The distribution of paradigmatic and syntagmatic responses to each verb type is

almost even. This distributional difference between English and Arabic may be accounted for by the fact that 34% of the responses to verbs in the English sample are ambiguous, i.e. may fall into more than one form class. Hence, we cannot make any sound conclusion as to which type yields more paradigmatic responses.

(B) Clark's Approach

Clark's approach to word associations is a featural approach. It attempts to show how subjects in WAT apply certain featural rules to stimuli in order to produce certain responses.

I do not assume with Clark that the ability to produce associations is a side-product of our ability to understand and produce language. The mechanisms employed in the production of associations are not different from those used in language use in general and, moreover, these mechanisms are cognitive in essence. Language acquisition involves a complex set of broadly transferable or generative skills - perceptual, motor, conceptual, social and linguistic - whose "coordination" makes language possible (Bruner, 1978: 18). Hence in word associations there is no justifiable sense in assuming that only the linguistic skill operates in isolation from the other skills.

Clark keeps the distinction between paradigmatic and syntagmatic responses. In the following brief

description of the rules suggested by Clark all the examples given are from my data.

Paradigmatic Rules

(1) The minimal-contrast rule: This rule has been discussed before in Chapter V(pp. 169-170). Clark forms the rule as follows: "Change the sign of one feature, beginning with the bottommost feature."

This formula assumes that features can be ordered in a motivated way. It is worthy of note that a semantic analysis should utilize the smallest number of symbols in a particular form. This is achieved by taking advantage of a relation between certain pairs of semantic features. This relation is called "the category inclusion relation". It holds between a pair of semantic features when the category represented by one is a subcategory of that represented by the other (Katz and Postal,¹ 1970: 16). (This relation is called "a rule of dependence" by Leech,² 1977: 120). For example, if a noun acts as (+ human) then it can occur as (+ animate), although the reverse is not necessarily true. Consequently, any word marked (+ human) can be predicted as being (+ animate).

1. Katz, J.J. and Postal, P.M. (1970). An Integrated Theory of Linguistic Descriptions, MIT Press.

2. Leech, G. (1977). Semantics, Penguin Books, Harmondsworth.

In other words, semantic features are hierarchically organized: (+ human) presupposes (+ animate); (+ adult) precedes (+ male).

Hence, a noun such as "man" should have the semantic features in the following order: + human, + adult, + male. Applying Clark's rule to this noun will produce the noun "woman" since the bottommost feature (+ male) is changed to (- male). If the penultimate feature (+ adult) is changed, the response produced is "boy"; if the last two features are changed the response "girl" is evoked.

Minimal contrast rules account for the bulk of associations within different form classes. Polar adjectives (long - short; good - bad) are the best examples. In my data 45.8% of the paradigmatic associations to adjectives are antonymous in the English sample, in contrast with only 29.1% in the Egyptian sample. The feature to be changed is (+ polar).

In addition, this rule accounts for converse verbs such as "sell - buy" in which the feature (+ polar) is changed.

(2) The marking rule: is a particularization of the minimal-contrast rule. In my opinion it is a duplicate of the minimal-contrast rule. It indicates, in Clark's view, the tendency to change the feature from, rather than to, its marked value. For example,

"man" is the unmarked form whereas "woman" is the "marked" form. "Long" is the unmarked form and "short" is the marked form.

In my view, there is no need for this rule since these marked and unmarked forms can be produced by the minimal-contrast rule. For instance, in my data, "saleswoman" produces "salesman". This could be produced by the minimal-contrast rule as in the reverse case: "man" produces "woman".

(3) The feature-deletion and -addition rules:

There appear to be rules that either delete features from, or add features to, the end of the feature list. The deletion rule should have precedence over the addition rule, since there are many possible features that might be added, but those to be deleted are exactly specified. Generally, deletion of features produces superordinates, like "fruit" from "apple"; "animal" from "dog", while addition of features produces subordinates like "apple" from "fruit".

Clark did not show how this rule is featurally applied. On the other hand, he did not explain how, for example, subordinates produce subordinates such as, for instance, "apple" produces "orange".

(4) The category-preservation rule: This rule accounts for the paradigmatic associations which

are characteristic of adult associations. But if we look at the minimal-contrast rule we find that it produces also paradigmatic associations because both the stimuli and responses are of the same grammatical class: man - woman; sell - buy; long - short. Therefore, in my view, there is no need for this rule.

The Syntagmatic Rules

(1) The selectional feature realization rule:

This rule simply accounts for the selectional features that particularly characterize the meaning of the potential content of the stimulus word. The adjective "young", for instance, has selectional restrictions on the nouns it can modify, as specified in the feature (+ Det (+ Animate) be -). Many responses to "young" are merely specific realizations of this feature, e.g. boy, child, girl, man and people.

In fact, this rule accounts for the differences in the number of syntagmatic responses to nouns, verbs and adjectives. According to Chomsky (1965) nouns have no selectional features, although verbs and adjectives do. Hence, nouns should elicit relatively few syntagmatic responses in comparison to other categories. Examination of Table 5 confirms this: syntagmatic responses to nouns in the English sample represent 25.5% of the total responses in contrast with 17.5% in the Egyptian sample, whereas paradigmatic responses represent

74.5% and 82.5% respectively.

The selectional features for adjectives specify the nouns they modify. Thus, adjectives should elicit nouns as the most frequent syntagmatic responses. My data, also, confirm this. Examination of Table 6 shows that 32.8% in the English sample and 41.7% in the Egyptian sample are nouns in contrast with 1.9% and 0.6% verbs respectively.

Similarly, the selectional features for verbs specify the subjects and objects that govern the verb. So nouns should occur most often in the syntagmatic responses to verbs. Once again my data confirm this. Table 7 shows that 39.4% and 53.3% of the syntagmatic responses to verbs are nouns for the English and the Egyptian subjects respectively.

In my opinion, these conclusions have significant pedagogic implications. I have argued before for the adoption of a featural approach to the establishment of word associations of the English native speakers in the Egyptian learners of English. In a featural approach to word associations, these conclusions mean that for nouns we should stress their semantic features (since they have no selectional features), whereas for adjectives and verbs we should stress their selectional features.

(2) The idiom-complete rule: This rule accounts for some common idiomatic phrases among

associations such as: white-house, cottage-cheese, justice-peace. It is a close cousin of the selectional feature realization. The rule might be stated: "Find an idiom of which the stimulus is a part and produce the next main word".

The significant implication of Clark's featural approach is that it shows that word associations can be a means of studying semantic memory (Herriot, 1974 expresses the same view). Semantic memory, according to Tulving (1972: 386) "is the memory necessary for the use of language. It is a mental thesaurus, organized knowledge a person possesses about words and other verbal symbols, their meanings and referents, about relations among them, and about rules, formulas, and algorithms for the manipulation of these symbols, concepts, and relations. Semantic memory does not register perceptible properties of inputs, but rather cognitive referents of input signals."

Associative meaning embodied in the phenomenon of associative clustering is shown to be highly patterned and reveals an underlying organization. It reveals that words are stored in memory in terms of their featural characteristics and the different relationships among them. Word associations show that stimulus words and responses have common attributes overlapping to different degrees.

It was evident that "contrast", for example, is the process underlying adjectives. Antonym responses

might be expected to occur when one particular attribute of meaning is by far the most dominant in one's coding of a word, or according to the "minimal-contrast rule" is the bottommost feature. This is true of adjectives and also of nouns. The function (Herriot, 1974: 139) of adjectives in discourse is possibly to enable the listener to decode the noun which the adjective qualifies primarily in terms of one particular semantic attribute. Therefore this difference in the nature of associative responses to words of different form class once again points to the subservience of grammatical to semantic attributes. Many experiments, in fact, support this conclusion, e.g. Hyde and Jenkins (1973); Hyde (1973); Horowitz and Manelis (1972); and Wold (1978).

The interpretation of associations in terms of attributes or features has further support from experiments on verbal learning and memory (Postman and Keppel, 1970). Associates were better recalled in free recall than non-associates. This suggests that overlapping attributes permit better coding of relations and hence better recall.

7.4.2 The Cognitive Dimension

To analyse the associative data from the cognitive perspective, the associations of both the English and Egyptian learners have been judged according to the cognitive grouping reported in the last chapter, namely,

perceptual, arbitrary functional, and appropriate functional.

(i) The majority of responses in the English sample fall in the category of "appropriate functional features" and reflect "the hierarchical structure of language".

(ii) Although the great bulk of responses in the Egyptian sample falls within the "appropriate functional features" category, it is noticed that the responses falling in the "perceptual" and "arbitrary functional features" are greater than those in the English sample.

This phenomenon may be explained by two facts:

a) Mental ability: It was observed that "perceptual" and "arbitrary" responses both in the English and Egyptian samples were given by learners reported to be of lower ability. Also idiosyncratic responses were given by the same learners. This indicates, on the one hand, that these learners have not yet developed the abstract hierarchical structure that enables them to produce the common responses which fall in the category "appropriate functional features", and on the other, confirms the assumption that word associations can be a measure of cognitive development.

b) Commonality: I used three indices of commonality: commonality of the primary response, commonality of the first three responses, and commonality of the first five responses.

Table 9: Idiosyncratic, excluded and left responses;
commonality of the first five responses;
commonality of the first three responses;
commonality of the primary response.

	English		Arabic	
	No. of responses	%	No. of responses	%
Idiosyncratic, excluded and left responses	10,346	11.4	13,002	15.7
Commonality of the first five responses	60,294	67.0	50,610	60.9
Commonality of the first three responses	52,047	57.8	38,663	46.6
Mean	69.95	-	51.90	-
SD	62.95	-	33.89	-
Commonality of the primary response	31,555	35.0	20,566	24.7
Mean	127.20	-	82.92	-
SD	63.90	-	37.89	-

Table 9 shows each index for the English and Egyptian subjects. It is evident that the commonality is remarkably higher in the English sample in the three indices. An important feature to be noted, in particular, is the high commonality of the primary response in the English sample which accounts for 35% of the responses in contrast with 24.7% in the Egyptian sample. The mean and standard deviation (SD) show

how high is the "associative clustering" in the English sample.

(As regards the English sample, the mental ability of the subjects was stated explicitly and officially in the headmasters' letters to me. The mental ability of the Egyptian system, on the other hand, was mainly indicated informally.)

From the cognitive point of view, the indices of commonality in Table 9 may be interpreted as an indication of cognitive maturity. It means that the English subjects have developed a higher level of cognitive abstraction and, hence, are cognitively more mature than the Egyptian subjects.¹ This may be accounted for by the fact that the English learners enjoy a better educational system and a more effective use of language functions at school and by mass media. This interpretation is in line with Bruner's theory which stresses the influence of education, and the use of language and the cultural factors on cognition.

In conclusion the mechanisms used by subjects in word associations may be viewed as cognitive rather than linguistic and general rather than associative. This view is identical to Rommetveit's (1978: 128-147):

1. This does not imply in any way that the Egyptian learners are cognitively backward; it only implies as has been indicated, that cultures with different tools may delay or accelerate the cognitive development of their individuals.

"Level of semantic competence is ... to a significant degree a matter of abstraction and decentration. A pair of polar adjectives such as old/young, for example, may be conceived of as essentially a general draft of a contract concerning categorization of age, and denotatively very different elaborations of the draft are required depending upon whether, for example, some person or some culture is being talked about ... Evidence from word associations studies testifies to a progressive emancipation of words from the particular experiential contingencies within which they were first encountered ... associative responses such as 'old - Granny' ... will be replaced at some later stage by the - apparently nearly compulsory - response 'old - young'. Increased abstraction and operativity is thus revealed in an integration of initially loosely related antonyms into a unitary and bipolar conceptual schema."

"What is involved in 'heavy-light, young-old, long-short' ... at the level of adult operative semantic competence seems, moreover, to be a mastery of a very abstract draft that in specific acts of verbal communication can be elaborated into reciprocally endorsed contrasts concerning categorization of 'work, meals, taxes, and duties as well as of stones, and men'. Some of these categorizations may be considered instances of 'literal', others of 'metaphorical' language use."

Antonymy reflects or determines what appears to be a general human tendency to categorize experience in terms of dichotomous contrasts. It is, however, a fact that binary opposition is one of the most important principles governing the structure of languages; and the most evident manifestation of this principle, as far as the vocabulary is concerned, is antonymy (Lyons, 1977: 271-277).

This cognitive view implies that linguistic rules may be different from psychological rules: "rules of grammar may bear no closer resemblance to the psychological laws of language production, comprehension, and use than do the principles of optics bear to the laws of visual perception - in neither case can the other violate the other." (Bruner, 1978: 18).

7.4.3 The Cultural Dimension

The point should be stressed that in the analysis of word associations the semantic content of associations cannot be well understood and accounted for appropriately unless the associations are dealt with in their cultural context. From a comparative point of view, linguistic and cognitive accounts for associations of two different cultures cannot account for the differences in the semantic content of associations from one culture to another. The data confirmed this view.

Examination of the Egyptian word associations reveals, for example, the frequency of the response "Allah" (the name of God among Moslems) in response to many stimuli such as: thank, remember and generous. This phenomenon which is absent from the English sample (absence of responses as God or Christ to these stimuli) reflects the dominant influence of religion in the Egyptian culture. This religious factor is also evident in the responses to stimuli such as: beer, wine, pig. Table 10 shows how dramatic are the differences in associative clustering of these stimuli between the English and the Egyptian cultures. This does not only indicate a difference in the "drinking and eating habits" but it does underly a difference in the mode of thinking.

Also the environmental differences between the English and Egyptian cultures lead to a difference in associative clustering. For instance, responses to "umbrella" reflect a functional difference. For the Egyptians it evoked: sun 30%, rain 14%, summer 8% whereas for the English it evoked: rain 76%, sun 0%, summer 0%.

Differences in the "eating habits", for example, are revealed in the responses to stimuli such as: beer, butter, potato, cheese, bread and jam. Some of the responses are culture-specific. For instance, "margarine" and "lard" for butter; "chips" and "mash" for potato; "cheddar", "cracker" and "bacon" for cheese;

Table 10: English and Egyptian responses to the stimuli:
pig, beer, wine

Stimulus	Main English Responses	Main Egyptian Responses
Pig	sty, bacon, pork, cow, farm, smell, fat, animal, eat, meat, food.	taboo, animal, dirty, dirt, meat, stupid, harm, harmful, dog, Europe, hated.
Beer	drink, pub, drunk, wine, spirit, lager, hops, alcohol, froth, nice.	taboo, wine, drunkenness, drink, foreign, harmful, corruption, drunk, wrong.
Wine	drink, red, grapes, beer, dine, glass, dinner, drunk, cellar, song, booze, champagne.	taboo, drunkenness, drunken, beer, drinking, whisky, harmful, cor- ruption, Christian, cabaret, women.

"baked", "runner", "broad" and "Heinz" for bean in the English sample. In the Egyptian sample, culture-specific responses appeared for these stimuli: "natural fat" for butter; "sweet-potato" and "Meloukhya" for potato; "white", "Turkish" and "Halva" for cheese; "taʕmeya" and "medames" for beans. (For the meanings of these responses, see the Egyptian associative norms.)

Differences in the social life may be evident in responses to stimuli such as: dance, taxi, telephone and car.

Differences in the social relationships among the different roles in the two cultures are evident in the responses to stimuli as: teacher, family and man.

Further evidence for the influence of cultural factors is evident in the responses to the stimulus word "king". In the English sample, it revealed "queen" as a primary response whereas in the Egyptian sample it evoked "president" as a primary response. It also evoked, in the Egyptian sample, the response "Allah".

Other culture- and language-specific responses appear in the responses to the stimulus "chair". The English subjects gave "stool" - a category name absent from Arabic. The English also responded with "arm" - a specific collocation of English also absent from Arabic.

It is also worth mentioning that there are some stimuli which evoked similar responses for the English and the Egyptian learners such as: "blanket, school and month". This may be the result of similar "functions" for these stimuli in both cultures.

It was observed that the stimuli which yielded the highest commonality for both English and Egyptian learners are "kinship stimuli": "father, mother, sister, son, daughter", though the commonality is higher in the English sample. This may be accounted for within

the frame of reference of socialization. It seems that the first social relationships and terminology the child is aware of are the family ones. Thus, these relationships are the first to develop towards social maturity and internalization of social norms.

The stimulus "government" yielded the most diverse response hierarchy for both the English and Egyptian learners. All the responses to this stimulus were of a very low frequency. This may be interpreted by the fact that at the age of fifteen, the subjects have no real interest in political matters, thus, they do not possess or share "common" political concepts.

7.4.4 Detailed Analysis of Some Domains

The following is a detailed analysis of some domains or categories in order to show that associations are not haphazard but are systematic and have their roots in the culture. It also shows that associations can be helpful in understanding the differences and similarities between two cultural modes of thought.

(A) Family Kinship

Father: The primary response "mother" represented 73.2% of the English responses to this stimulus in contrast with 33.5% of the Egyptian responses. For the Egyptian learners affective responses (e.g. kind,

kindness, love, etc.) represented 19.1% whereas in the English responses, affective responses were almost absent.

Mother: "Father" was the primary response with a frequency of 60.2% and 28.4% for the English and Egyptians respectively. The affective responses to this stimulus represent 38.2% of the Egyptian responses whereas they were nearly absent in the English responses.

Sister: "Brother" was the primary response with a frequency of 80.2% for the English and 38.7% for the Egyptians. Affective responses for the Egyptians were 43.4%.

Son: The primary response was "daughter" with a frequency of 59.4% for the English and 21.9% for the Egyptians. It was observed that in the Egyptian sample, the responses: "father, brother and boy" represent 30.4% of the total responses to this stimulus and this reflects the dominance of the male figure in the Egyptian culture in general and the family in particular.

Wife: "Husband" was the primary response. It represented 85.3% of the English responses and only 17% of the Egyptian responses. The responses "sincere,

sincerity, faithful, faithfulness" represented 27.9% of the Egyptian responses. These responses represent the most important characteristics which should be present in the Egyptian wife.

Uncle: In English it evoked the opposite sex: aunt with a frequency of 75.8%. In the Arabic version of the test "uncle" refers to father's brother only. The primary response for the Egyptian was "uncle: the mother's brother" with a frequency of 37.7%. "Father, relative, brother" represented 34.6% of the Egyptian responses. This associative distribution in the Egyptian sample reflects, once again, the dominance of the male figure in the Egyptian culture.

(B) Foods (including vegetables and fruit)

Meat: although this stimulus revealed similar responses in the English and Egyptian samples (e.g. food, eat, cow, animal, fish, chicken), it revealed very different responses which, in fact, reflect the native strong associations for each culture. For instance, the English subjects gave: "pork, ham, bacon, roast, pig". The Egyptians, in contrast, gave "fowl" which is believed, by the majority of Egyptians, to be as nutritious as meat; "queue" because it is customary in Egypt to queue and crowd for getting meat; "co-operative society" (which is owned by the government) where

meat is sold much cheaper than the butcher's (and where people always queue and crowd for meat); "expensive": meat is too expensive to buy; "season": where meat is eaten in large quantities on social and religious occasions and seasons.

Butter: This stimulus also indicates different eating habits. For the English, being customary to spread it on bread and eat it, the primary response was "bread" with 40% frequency. In contrast, "bread" was given in the Egyptian sample only by two subjects. "Margarine" was also an English unique response (13%). The Egyptian primary response was "natural fat" which is always used in cooking. "Spread" and "lard" were also unique English responses.

Bread: The primary response in the English sample was "butter" with a frequency of 43.1%. This confirms the strong association between "bread and butter" for the English. Also, "butter" was given only by two Egyptian subjects.

Jam: Like "butter" this stimulus evoked for the English "bread" as a primary response (23.6%). This response was absent in the Egyptian sample. "Strawberry" was the second response for the English (13.7%) and also indicates the popularity of this kind of jam. Being unpopular in the Egyptian culture,

"strawberry" was given only by six Egyptians. Another difference in the eating habits is indicated by the English response "marmalade" (9.6%) and its absence in the Egyptian sample because it is unknown in Egypt. "Butter" was also a common associate for jam with a frequency of 8.8% whereas it was given only by two Egyptian subjects.

Onion: The English primary response was "cry" (36.8%). For the Egyptians, the primary response was "garlic" (23.2%). This reflects an important difference in the eating habits between the English and Egyptians. For the Egyptians, "onion and garlic" are closely related; they are always used together in Egyptian cooking. For the English, on the other hand, they are not related. This is supported by the responses to the stimulus "garlic". "Onion" was the Egyptian primary response (37.2%) whereas it represented only 8.5% of the English responses.

Tomato: Generally, the responses are similar in both samples. But there are some culture-specific responses. For example, "fruit" was given by 11.6% of the English subjects; for the Egyptians "tomato" is never a fruit.

Biscuit: For the English "biscuit" is associated with "tea" which was the primary response (20.7%).

For the Egyptians it is associated with "children" which was also the primary response (19.8%).

Potato: It also reveals different eating habits. In English "chips" was the primary response (22.3%) whereas in the Egyptian sample it was absent. Other unique English responses were: "mash" (10.1%) and "crisp" (3.8%). For the Egyptians, "starch" was the secondary response (13.1%) and was given only by four English subjects. "Sweet-potato" was a unique Egyptian response (6.4%).

Apple: Being popular for the English, the English subjects gave: "orange" (24%), "pear" (21.3%), "fruit" (21.3%). For the Egyptians, on the other hand, "apple" is not popular and so expensive that only certain people can buy it. Thus most of the responses concentrate on "adjectival" attributes: "red, American, sweet, nice, rare, Lebanese and expensive".

Grape: This stimulus revealed similar responses. The important difference noticed was that "wine" was the second response in the English sample (14.5%) whereas in the Egyptian sample it was the tenth (2%). The reason can be understood in terms of the cultural importance of "wine" in each culture.

(C) Drinks

Tea: Although "coffee" was the primary response for the English and Egyptians: 36.1% and 16.7% respectively, it is important to note that "coffee" in the Egyptian society is different from that kind of coffee in the English society. In Egypt "ground coffee" is the main kind.

Juice: An important difference between the English and Egyptian cultures is that "orange" is the most popular juice for the English, thus, was a primary response (40%). In Egypt the most popular juice is that of "sugar cane" which was the primary response (16.7%).

Milk: Although the responses were similar for both the English and Egyptians, it revealed an important difference. The response "adulterated" was given by 7.2% of the Egyptians; a familiar concept in Egypt in relation to foods and drinks.

Beer: see Table 10.

Wine: see Table 10.

(D) Occupations and Professions

Engineer: Responses reflect an important cultural difference. The English concentrated on the

"industrial" concepts related to the role of engineer in the society. For example, the English gave "cars" as a primary response (14%), a reflection of a major industry in England. In contrast, the Egyptian primary response was "doctor" (physician). The English also gave: "worker, work, mechanics, mechanical, train, engine, etc.", concepts closely related to the "work" of the engineer. The Egyptians, on the other hand, were thinking of "engineer" in contrast with other professions as "doctor". Moreover, the Egyptians gave the responses "architecture and architect" which reflect the popularity of that kind of "engineer".

Worker: The important cultural difference between English and Egyptian responses is the absence of the response "official" (person holding a government position or engaged in public work) in the English associations. This response represents 10.3% of the Egyptian responses and reflects the sharp distinction between workers and officials in the Egyptian culture. Working in the government as "officials" is highly appreciated in Egypt.

(E) Miscellaneous

Breakfast: "For the English it evoked: "cornflakes" (8.8%), "cereal" (6.2%), "toast and bacon" (8.3%). These responses represent main elements

in the "English breakfast" and are unknown for the Egyptians. For the Egyptians, "foul" was the main, and generally the only, element in the "Egyptian breakfast" (11.1%).

To Cook: This stimulus revealed some of the important cultural concepts behind it. The Egyptians gave "mother, woman and daughter" which together represent 19.8% of the total responses. In the Egyptian culture "cooking" is considered to be the main "duty" of a woman, whether a mother, a wife or a daughter. In the English sample, it revealed the concept "chef" though with a low frequency of 4.1%.

Entertainment: The difference in the meaning of that concept between the two cultures may be understood by the responses given to it by the English and the Egyptians. The English responses were: "fun" (16.2%), "show" (13.5%), "music" (6.7%), "cinema" (6.4%). The Egyptians' primary response was "greek seeds" (24.3%) (for the meaning and connotations, see the Egyptian associations), "chess" (14.8%), "play" (recreation) (12.1%).

Bus: The primary response in the English sample was "stop" (39.4%). - The primary response in the Egyptian sample was "crowd" (25.1%), a word never

appearing in the English responses. The response "crowd" clearly reflects the situation in Egypt, it is customary to "crowd" and to "fight" to get into a bus.

Tourist: The English primary response was "holiday" (18.9%). It reflects the close relationship between being a tourist and being on a holiday. The English people usually go abroad when they are on a holiday, hence they become "tourists". On the other hand, England receives a large number of tourists. The response "holiday" never appeared in the Egyptian responses.

Finally, to interpret the data from the cultural perspective, we have to look again at the indices of commonality in Table 9. The remarkably high commonality of the English subjects indicates a higher level of social maturity, i.e. conformity to the social norms standard in the culture. This interpretation is supported by the fact that in the Egyptian sample the idiosyncratic responses are remarkably higher than in the English sample: 9.7% and 5.3% respectively. This may be interpreted, in turn, in terms of the influence of a better educational system, a more effective use of language functions and other tools of culture. This is also in line with Bruner's theory of cognitive development which stresses the influence of culture.

7.5. The Pedagogic Implications

So far we have dealt with the three dimensions of our approach separately. It is our objective in this section to show the interrelationships between these dimensions and their pedagogic implications.

The first task is to investigate the role of associative relations in the cognitive structure of people, i.e. in the process of cognitive abstraction.

Semantic categories arise out of cognitive operations and are best characterized by the nature of these operations. The fundamental cognitive operations of abstraction are: binary contrast, hierarchical structure (i.e. superordination, subordination, etc.), whole-part relations and grouping.

Examination of both the English and Egyptian associative norms reveals that associations have direct relation to these cognitive operations, i.e. some associations are produced in terms of these cognitive operations simply because these operations are reflected in the hierarchical structure of language. Some associations may be abstracted by certain cognitive operations and not by others by virtue of the nature of these associations.

Thus, we have to investigate what differences exist between the English and Egyptian learners in terms of the cognitive operations underlying their associations. In terms of the categories of experience used in the test

(i.e. family kinship, foods, professions, etc.) do the English and Egyptians employ the same operations for each category? Do they employ different operations for the same category? Do the different categories of experience share any underlying cognitive structure which enables us to make any generalization about the cognitive structures of both the English and Egyptians?

It is observed from the analysis of the category "family kinship", for example, that the cognitive operation underlying this category is "binary contrast" which is associatively linked with the linguistic operation "minimal contrast". The striking difference between the English and Egyptians is that this cognitive operation is overwhelmingly dominant for the English. For the Egyptians affective associations represented 34.2%. These affective responses were almost absent in the English sample.

Another category, animals, reveals different cognitive operations. Both English and Egyptian associations reveal that farm animal stimuli evoke farm animal responses, pet animals evoke pet animals, wild animals evoke wild animals, etc. This type of cognitive organization reflects a group classification operation.

On the other hand, animal associations may be analysed in terms of hierarchical classification. Generally both the English and Egyptians tend to respond with coordinates to animal stimuli. But the English

and Egyptians do not give the same coordinates. For example, to the stimulus "buffalo" the English give the coordinates "bull 39.7%, cow, 6.1%, bison 4%, etc." The Egyptians, in contrast, give "cow 17.8%, donkey 2.8%, sheep 1.2%". This shows that two different types of experience, produce different cognitive contents. In other words it shows the influence of experience on cognition.

Other categories that may be analysed in terms of hierarchical operations are: fruit, vegetables and furniture. These categories are not analysable, for instance, in terms of the binary contrast operation. Are there any significant cognitive differences between the English and the Egyptians in the cognitive structure underlying categorization? Our analysis of associations in the categories: "animals, fruit, vegetables and furniture" in terms of hierarchical structure reveals that the English have developed a higher level of abstraction since they employ the hierarchical structures more than the Egyptians do as shown in Table 11.

It is noticed that the coordinate responses given by the English to stimuli in these categories are remarkably higher than those given by the Egyptians. The pedagogic implication is that these associative coordinates given by the English have to be recognized by the Egyptian learners since they reflect the interests and significant distinctions in the English culture.

Table 11: Cognitive structure underlying some categories

Class Category	Superordinates		Coordinates		Perceptual	
	English	Egyptian	English	Egyptian	English	Egyptian
Animals	6.7%	15.8%	40.9%	18.8%	-	-
Fruit	28.1%	23.5%	18.5%	13.8%	7.8%	19.2%
Vegetables	27.1%	13.2%	20.4%	16.3%	4.3%	2.9%
Furniture	6.4%	1.5%	14.9%	8.7%	3.0%	7.9%
Total	68.3%	64.0%	94.7%	57.6%	15.1%	30.0%

Other categories, such as "parts of the body", are analysed in terms of "part - whole" relations.

Cognitive analysis of associations shows that many associations cannot be explained in terms of the cognitive operations mentioned above. These associations do not reflect the hierarchical structure of language. For example, English associations to "buffalo" include "cowboy, meat, Spain, zoo, west". The Egyptian associations include "meat, peasant, village, countryside, goodness, butter, plough, giving". To "cow" English associations include "moo, beef, grass, pasture" whereas the Egyptian associations include "countryside, milch, natural fat, cheese, wealth, useful".

English associations to "birthday" include "parents, happy, party, age, Christmas, cards, gifts, cake, anniversary". The Egyptian associations include

"happy, celebration, joy, presents, party, happiness". English associations to "holiday" include "rest, abroad, summer, sun, break, vacation, sea, Spain, travel, beach, away, camp, tour". Egyptian associations, in contrast, include "vacation, comfort, Friday, weekly, official, leisure time, summer, going out, nice, study".

This sort of associations which do not show any cognitive structure or linguistic structure may be called "conceptual associations" implying that they are conceptually related. This brings us back to the point made in Chapter III (page 80) that the relationship among items of a category may depend on contextual contiguity, that is, through occurrence of items together in real life. Conceptual associations reflect contextual contiguity.

On the other hand, "conceptual associations" reflect the fact that language is not the only constraint on cognition; experience also has its influence. This is supported by the fact that conceptual associations, as seen in the above example, differ from culture to culture, i.e. different cultures have different influence on cognition.

This, in turn, supports the view mentioned in Chapter VI (page 189) that cognitive organization is not infinitely malleable. Human beings have characteristic ways of organizing certain experiences regardless of language.

From the pedagogic point of view, conceptual associations may be of significant value for the course designer or the teacher. They help recognize the cognitive differences, between cultures, underlying certain concepts. For instance, for the English the concept "holiday" is highly associated with being abroad whereas for the Egyptians it is not. This reflects a distinctive difference in the social life between the English and Egyptians which the Egyptian learners have to recognize. Recognition of such a difference, for example, may stimulate the learners to enquire about the "why" of the difference. This may lead to discussion of topics such as: work and holiday system, available facilities which encourage people to travel, the geographical surroundings of Britain, youngsters working part-time to save for their holiday, etc.

Another example is the concept "wine" which also reveals an important difference not only in drinking habits, but also in beliefs and attitudes. To enable the learners to recognize this difference it may be helpful to make use of the propositional characteristics of associations.

One of the most important conceptual changes that has recently happened in cognitive psychology is the assimilation of the associative relationships to linguistic structures generally. Anderson and Bower (1973) showed that almost any account of mental processes from

classical associations through S-R theory to theories of linguistic processing based upon transformational grammars as well as theories of artificial intelligence can be so described. Within this framework of reference, free word associations may be considered abridged versions of propositional structures.

To say that free associations express propositions is simply to give them the character of the most general class of linguistic relations. It enables us to abolish a distinction between meaningless and meaningful associations. Meaningfulness is reflected in the richness or number of propositions that can be generated about a particular concept (Szalay and Deese, 1978: 15). This, in turn, provides us with a measure of the subjective meaningfulness of any particular concept. Moreover, comparing the propositions made to the same stimuli in different cultures enable us to know how different or similar they are.

If we look now at the English associations to the stimulus "wine" we find: "drink, red, grapes, beer, dine, glass, dinner, drunk, cellar, etc." To say that these associations are propositions can be verified as follows: wine is a drink or we drink wine; wine is red; wine is made from grapes; wine and beer are similar or related; a glass of wine; wine and dine or we drink wine when we dine; we drink wine at dinner; too much wine makes you drunk; a wine cellar or wine is stored in a cellar.

In contrast, if we look at the Egyptian associations to "wine" we find: "taboo, drunkenness, beer, drinking, whisky, harmful, corruption, Christian, cabaret, women". To look at these associations as propositions we find: wine is taboo; drinking wine leads to drunkenness; wine makes you drunken; wine and beer are similar or related; wine-drinking; whisky and wine are similar or related; wine is harmful; drinking wine is a sort of corruption; only Christians drink wine; wine is associated with cabaret; wine and women are related (corruption).

These associations or propositions show explicitly how the meaning of the concept "wine" is different in the English and Egyptian cultures. Another important observation is that the "identical propositions" in the two samples have very different meanings. For instance, the proposition: "wine and beer are related" means different things in the two cultures. The difference is well understood in the light of the overall meaning of "wine" explicit in propositions made in each culture. Thus, that proposition means in the English culture: wine and beer are related because both are alcoholic drinks; whereas in the Egyptian culture it means: wine and beer are related because both are taboo, lead to drunkenness, harmful and a kind of corruption.

This important propositional characteristic of associations may be made use of pedagogically as a form of exercise as shown in Exercise 12 below.

Categories of experience do not exist independently. They are interrelated. Can we, then, infer, any common cognitive structure underlying different categories? For example, it has been mentioned that 34.2% of the Egyptian associations to the family stimuli are affective associations. Is this phenomenon specific to family relations only or is it common to other categories?

Analysis of associations in different categories reveals that affective associations are present in some categories as follows:

(1) Parts of the body

45.9% of the responses to "face"; 14.5% of the responses to "arm"; 13.5% of the responses to "body"; 5.4% of the responses to "hand". Affective associations to these "parts" are absent from the English sample. To the stimulus "heart", 66.4% of the Egyptian responses are affective in contrast with only 23.2% in the English responses.

(2) Professions

To the stimulus "nurse", 32.1% of the responses in the Egyptian sample are affective in contrast with only 10.2% in the English sample. To the stimulus "teacher", affective associations represent 32.4% of the Egyptian sample whereas they are absent in the English associations.

(3) Animals

In the Egyptian sample, 14.5% of the associations to "cat" and 17.5% of the associations to "dog" are affective. Affective associations to such stimuli are absent from the English sample.

(4) Colours

In the Egyptian sample, 14.1% of associations to "white" and 9.4% of associations to "yellow" are affective. For the stimulus "black" 29.4% of the Egyptian responses are affective in contrast with only 4.5% in the English responses.

Thus we can infer a common cognitive pattern, i.e. affective versus non-affective. This pattern indicates that categories or domains of experience are inter-related and may reflect a general cultural trait.

This cognitive pattern may be accounted for, in my view, within the framework of reference of socialization. It has been mentioned in Chapter VI (page 190) that the socialization process in the English culture is individualistic whereas it is collective in the Egyptian culture. In a collective culture a social interpretation of an act not only relates the actor to the group, but also relates the group, including the actor, to physical events. When, on the other hand, acts are given an interpretation in terms of motoric competence - in an

individualistic culture - other people are irrelevant, and the act is separated, moreover, from the motivations, intentions and desires of the actor himself.

Thus one of the advantages of selecting a relatively large number of categories or domains is that it helps reveal any common cognitive structure underlying these domains.

Now what is the pedagogic implication of such a significant cognitive difference between the English and Egyptians? Of what value is it for the course designer or the teacher?

In my view, Egyptian learners have to recognize this cognitive difference. This may be achieved by enabling them to recognize the underlying differences in ways of socialization in the two cultures. Therefore topics which reveal that the English people encourage their children to have their own independent personalities. For example:

- By the age of sixteen (school-leaving age) English young people can leave their parents' home and live independently (boys and girls);
- English young people feel free to express themselves openly before their elders;
- English young people may earn money by baby-sitting or part-time jobs;
- Most English parents encourage their youngsters to find part-time jobs;
- English young people like to earn their own money.

Also topics which reveal that girls have their own independent personalities as boys, and that the male figure is not as dominant as in the Egyptian society may be introduced. For example, girls can go out or go on holiday alone. Girls can go out with their boy friends.

Hence, word associations may help the course designer select some topics for the course on an objective basis. Usually such a selection is done on a purely subjective basis, i.e. the designer mainly depends on his own personal intuition.

On the other hand, such topics are likely to be stimulating and interesting for the learners unlike the local context of their course as has been indicated in Chapter III (pages 76-77).

Another example that shows the interrelationship between categories of experience:

In the English sample, "garden" was a response to "house" with a frequency of 10.8%, a reflection that "garden" is an essential part of the English house. It is noticed, on the other hand, that "garden" is among the responses to every vegetable stimulus in the English sample reflecting the fact that the house-garden is generally used for growing vegetables.

Other categories such as: vegetables, fruits, foods and drinks, taken together reveal differences in the eating and drinking habits. This may provide some of the topics or teaching items such as: different ways of cooking (for instance, garlic and onion are not related

as in Egyptian cooking); tomato is a vegetable as well as a fruit; components of breakfast, etc. (see Exercise 13 below).

From the pedagogic point of view, word associations may throw light on some of the linguistic associations to some words or, in other words, some of the associations which may be brought to the learners' attention. Such associations are, for example, "chips, mash, peel, crisp" to "potato"; "sty, bacon, pork" to "pig"; "juice, sauce, soup, ketchup" to "tomato"; "margarine, lard" to "butter"; "beef, prok, lamb" to "meat"; "corn, barley, cereal" to "wheat", etc. These associations reflect the important distinctions the English people make. At the same time they reflect the English way of categorizing experience. It is evident from the Egyptian associative norms that these linguistic associations are absent since they do not represent significant distinctions for the Egyptians and are irrelevant to their categorization of experience.

Another cognitive difference between the English and Egyptians is that the cognitive operation of binary contrast is remarkably dominant in the English sample. This is apparent in the high frequency of the minimal-contrast rule in the English sample. This phenomenon is reinforced by the fact that antonymous responses to adjectives in the English sample represent 45.8% of the

paradigmatic responses to adjectives, in contrast with only 29.1% in the Egyptian sample. Synonymous responses to adjectives in the English sample represent 14.7% of the paradigmatic responses and 13% in the Egyptian sample.

From the pedagogic point of view this may be brought to the Egyptian learners' attention as described in Exercise 1. As for adjectives they may be presented to the learner with emphasis on antonyms.

It is also argued that word associations may provide us with the most frequent adjectives that stand in paradigmatic relation with adjective stimuli as well as the frequent words that stand in syntagmatic relation with the adjective stimuli. For example, associations in the English sample to the adjective "beautiful" show the following relations:

Beautiful		girl
ugly		woman
pretty		flowers
nice		eyes
handsome		countryside
good looking		face
lovely		

It has been mentioned (page 219) that verbs and adjectives have selectional restrictions. Word associations may provide the course designer and the teacher with such selectional restrictions. This is illustrated in Exercises 9 and 10 below.

It has been mentioned in Chapter V (pages 172-174) that verbs do not exhibit a hierarchical organization like concrete nouns. Verbs form "semantic fields" according to common elements of meaning. Besides, verbs encode categories of action and states which require objects. In this sense, verbs may be said to encode conceptually dependent categories. They have connections to their arguments and to verbs in other semantic fields.

Given these suggestions about the semantic organization of verbs, it may be argued that syntagmatic responses to verbs occur because related verbs are not available. In other words, paradigmatic associations to verbs are semantically related to their verb stimuli.

Hence, paradigmatic associations to verbs may provide the course designer or the teacher with the most frequent semantically related verbs whereas syntagmatic associations provide the most frequent arguments for these verbs.

It is worthy of note that "semantic fields", whether for verbs or nouns, are purely subjective, i.e. they are organized by the linguist on the basis of his own intuitions. On the other hand, "semantic fields" represent only the intralinguistic relations in the lexicon.

Word associations, in contrast, may provide us with the semantically related words on a communicative basis since word associations represent verbal behaviour outside the test situation as has been indicated in Chapter II.

Pedagogically, the learner need not know or learn the whole structure of a semantic field. He only has to learn those more useful or more available elements. Word

associations provide us with these more available elements in terms of frequency of occurrence.

Thus, for verbs, word associations may provide us with the most frequent verbs that stand in paradigmatic relation with verb stimuli. Also they provide the most frequent arguments that standⁱⁿ/syntagmatic relation with the verbs. For example, in the English sample, paradigmatic verbs to the stimulus verb "build" include "make 13.5%, construct, 11.6% erect 5.9%, destroy 2.7%, demolish 2.7%". Syntagmatic responses are: "House 23.7% and flat 1.6%".

built		
make		
construct		house
erect		flat
destroy		
demolish		

It may be asked: on what grounds may the course designer give priority to topics? How can he, for example, decide that topic A is more important than topic B? Or item (a) is more important than item (b)?

It has been shown in Chapter II that word associations statistically reflect verbal behaviour outside the test situation. Thus, the salience of components of associative meaning may be used as an indicator of the communicative value of concepts and, in turn, their salience or importance as teaching topics and items.

It has been also argued in Chapter II that word associations may reflect the semantic frequencies in the vocabulary. Hence word associations may be used by the course designer as a guide in deciding which sense or

meaning of a word is more frequent, i.e. more available.

For instance, word associations show how people think of words and concepts. Associations in the English sample to the word stimulus "spring" reveal that 50.2% think of it as a "season", 4.3% as "spring lamb", 2.9% as "bounce", 2.9% as "jump".

It has been also indicated (p. 80) that categories of experience overlap. For example, "heart and liver" may be categorized as "parts of the body" as well as "food". But how do people think of them? Our associative data reveal that both the English and Egyptians think of "heart" as a "part of the body" whereas both think of "liver" as a "food". This may be because "heart" is a universal symbol for love whereas "liver" is a very familiar food in both the English and Egyptian cultures.

It is now evident that our analysis of the associative data confirms the view that "a more adequate anthropological study of language has a basic import for the general problem of understanding another culture It may well be that we shall discover significant differences between cultures in their attitudes towards language and symbolization. Some cultures might have a strongly expressive bent, while others could well be highly pragmatic and instrumental" (Crick, 1976: 67). For the latter, it would be an error not to emphasize the instrumental aspect of prayer and ritual (Buxton, 1973: 415-6). In the Egyptian culture, "prayer" and "ritual" are highly instrumental; this may account for the salience of the religious responses to many stimuli in the Egyptian sample.

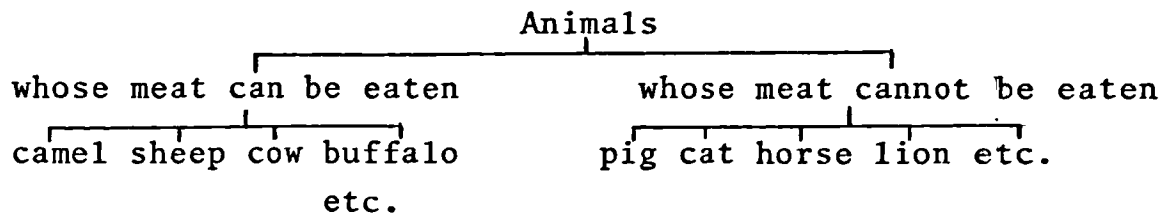
The analysis also shows that subjective meaning in the English culture is different from that in the Egyptian culture as evident in the associative meaning of associations in each sample. This, in turn, supports the view mentioned above that the "categorical grid" differs from one culture to another.

Associative meaning, it is now evident, is based upon a closely related cognitive categorization common to the people of a culture. This cognitive categorization is expressed by the people in a common, associatively linked, linguistic code. This explains the difference in associative meaning between different cultures: each culture has a distinctive cognitive categorization associatively linked with a distinctive linguistic code.

It follows then that Egyptian learners of English have to recognize the different ways of categorizing experience made by the English people. This is better achieved by learning English in its English cultural context rather than an Egyptian cultural context. In other words, Egyptian learners have to recognize the associative relations underlying the cognitive structure of the English people.

This, of course, will entail a process of reorganization of experience. The Egyptian learner has to make some modifications to his existing categorization in order to accept other people's ways of categorization. In other words, he has to get rid of or avoid ethnocentrism. For instance, Egyptian learners may classify animals in terms of eating habits as in diagram 1:

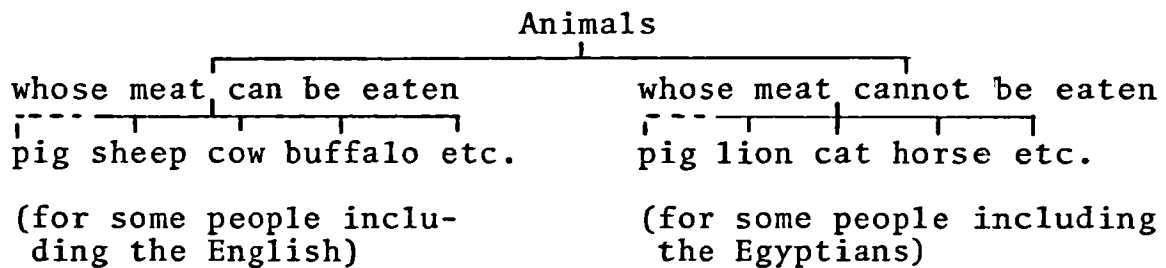
Diagram 1: Egyptian classification of animals in terms of eating habits



In learning English, the Egyptian learners have to modify their classification to accommodate the fact that the English people eat the meat of pigs, as follows

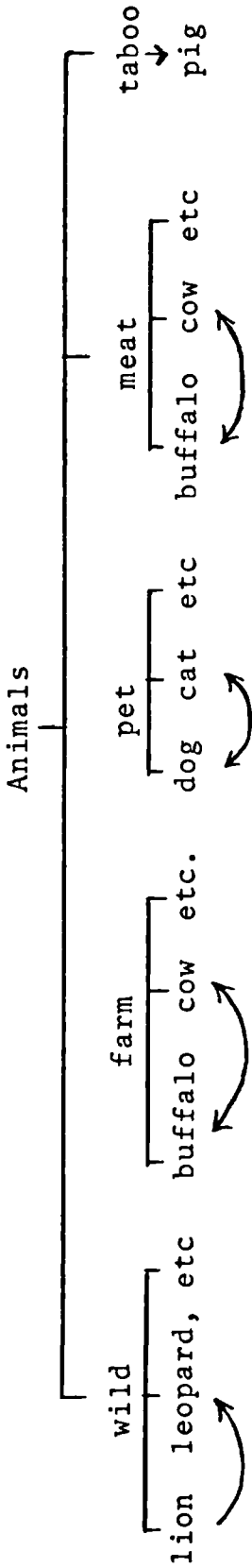
(Diagram 2):

Diagram 2: Modified classification of animals in terms of English eating habits



A comprehensive classification of animals based on the associative distributions to animal stimuli reveals differences in ways of categorization between the English and Egyptians. For example, the Egyptian associative structure of animals may be as shown in Diagram 3:

Diagram 3: Egyptian associative classification of animals



Key: : item to the left evokes item to the right
 : item to the right evokes item to the left
 : both items evoke each other

(for this and the following diagrams)

In contrast, the English associative structure of animals may be as shown in Diagram 4 on page 261.

To accommodate these associative differences, the Egyptian learners have to modify their classification as in Diagram 5 on page 262.

It has been reported in Chapter V (pp. 168-9) that it is more efficient to represent the fact that words can be classified in numerous ways by assigning lists of features to words rather than by assigning words to lists. From the above classification it can be seen that the feature list of "pig", for example, includes different features for the English and Egyptians. On the one hand, the Egyptian feature list includes: (+ animal), (- meat), (- farm). On the other hand, the English feature list includes: (+ animal), (+ meat), (+ farm). The two feature lists may be combined as follows: (+ animal), (+ meat) (+ for some people including the English; - for some people including the Egyptians), (+ farm) (+ for some people including the English; - for some people including the Egyptians).

Diagram 4: English associative classification of animals

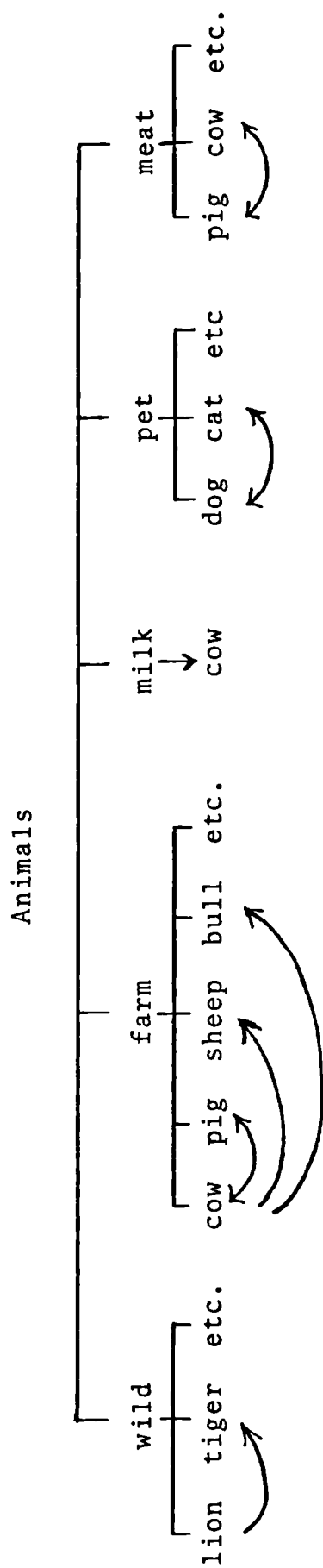
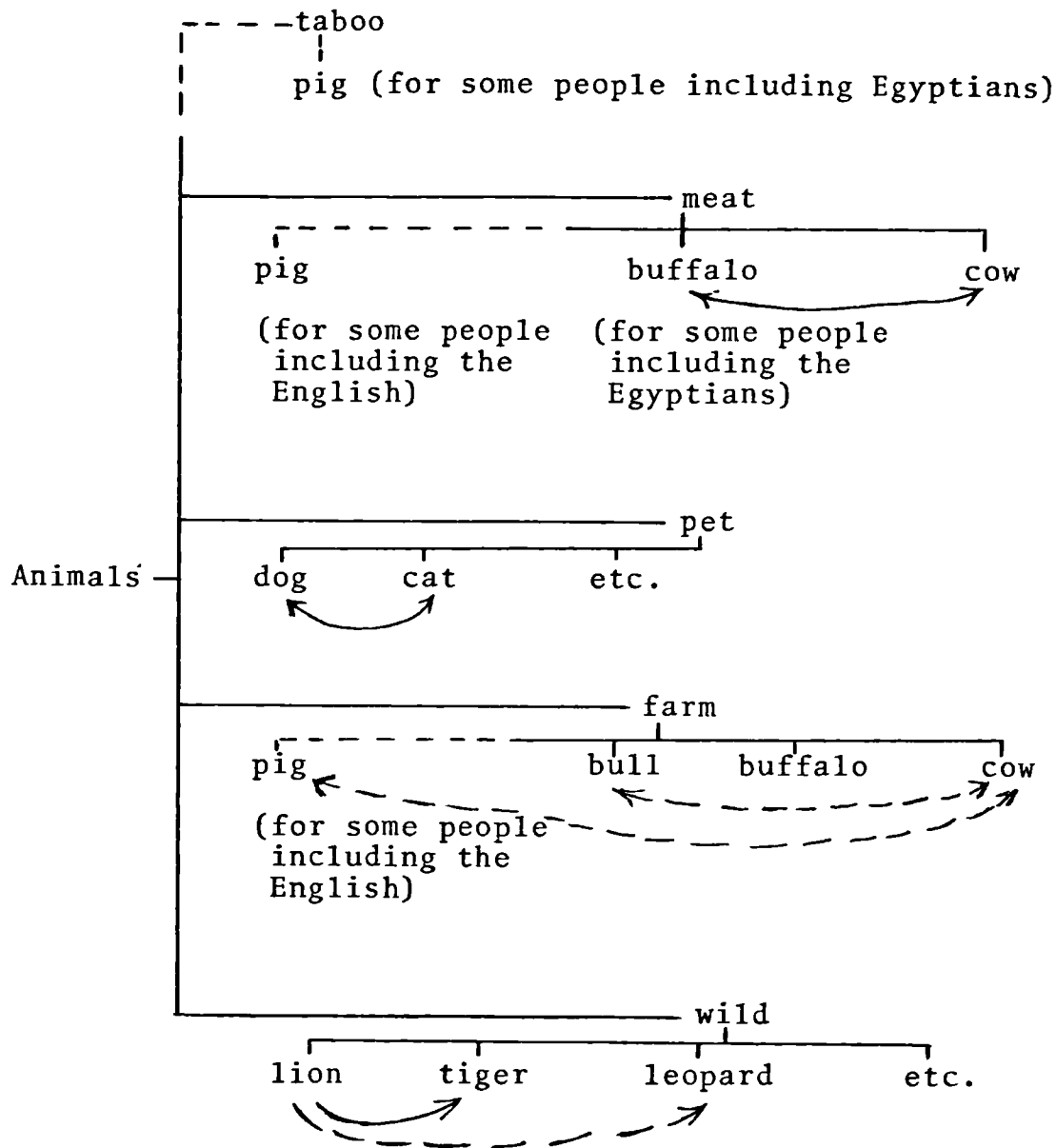
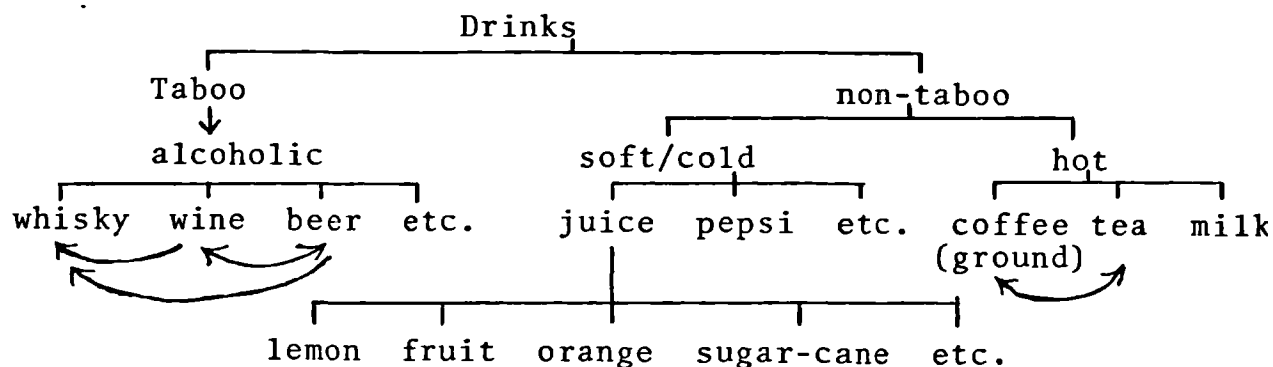


Diagram 5: Modified associative classification of animals



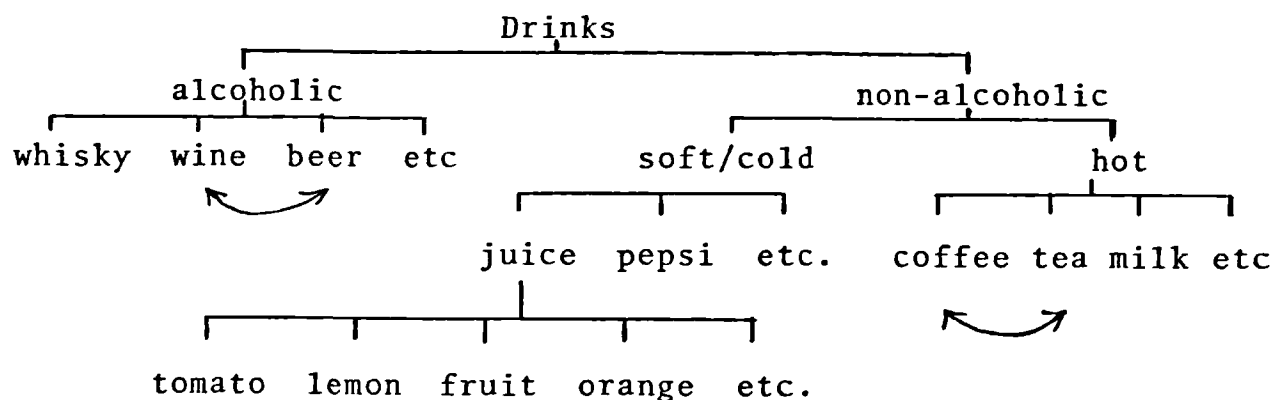
Another category is "drinks". The Egyptian learners may have the following classification (Diagram 6):

Diagram 6: Egyptian Associative classification of drinks



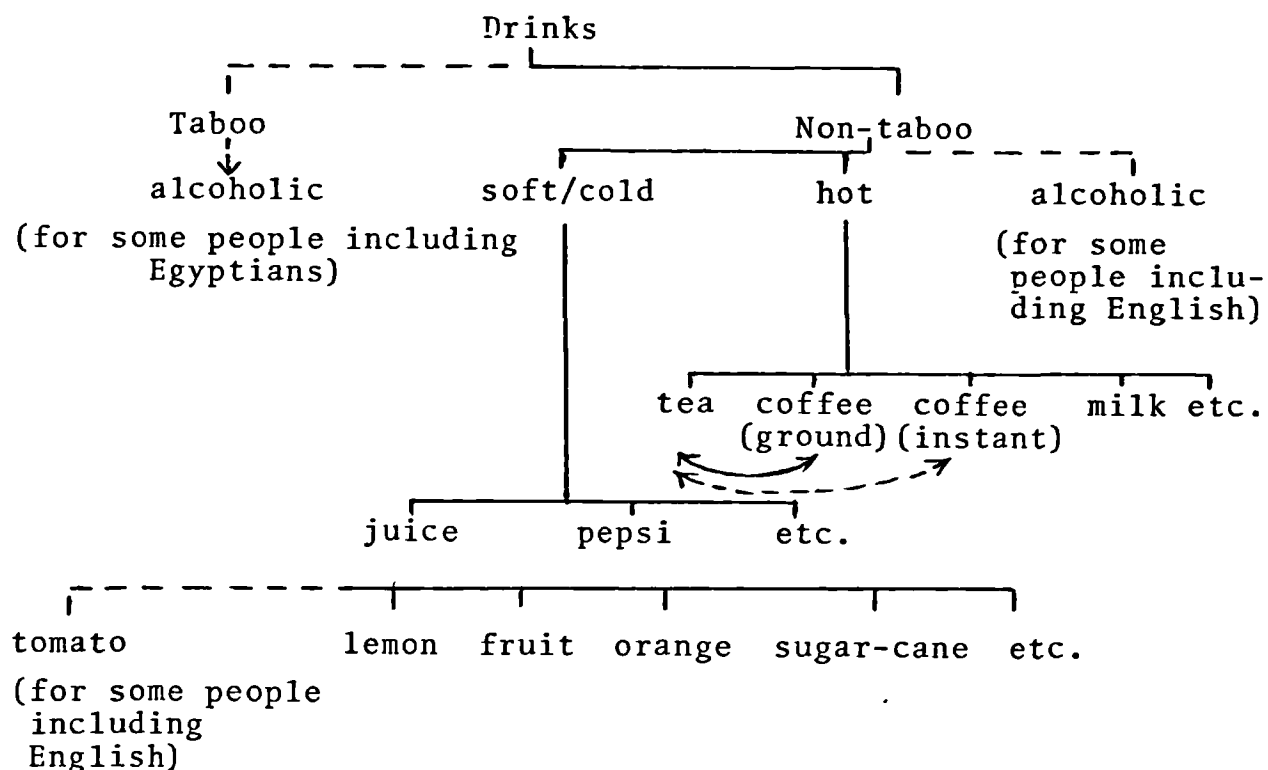
The English learners, in contrast, may have the following classification as shown in Diagram 7:

Diagram 7: English associative classification of drinks



Thus, in learning English, Egyptian learners have to modify their classification to the following (Diagram 8):

Diagram 8: Modified associative classification of drinks



A third category is "food". The Egyptian learners may classify food as shown in Diagram 9: The English learners, in contrast, may have the following classification as in Diagram 10. Once again the Egyptian learners have to modify their classifications to the ones in Diagram 11.

These types of classification imply that the learner is not learning a completely new categorization, rather a modification of his already existing one. This is in accordance with Widdowson's view (1979: 111) that the process of learning a foreign language should be

Diagram 9: Egyptian associative classification of food

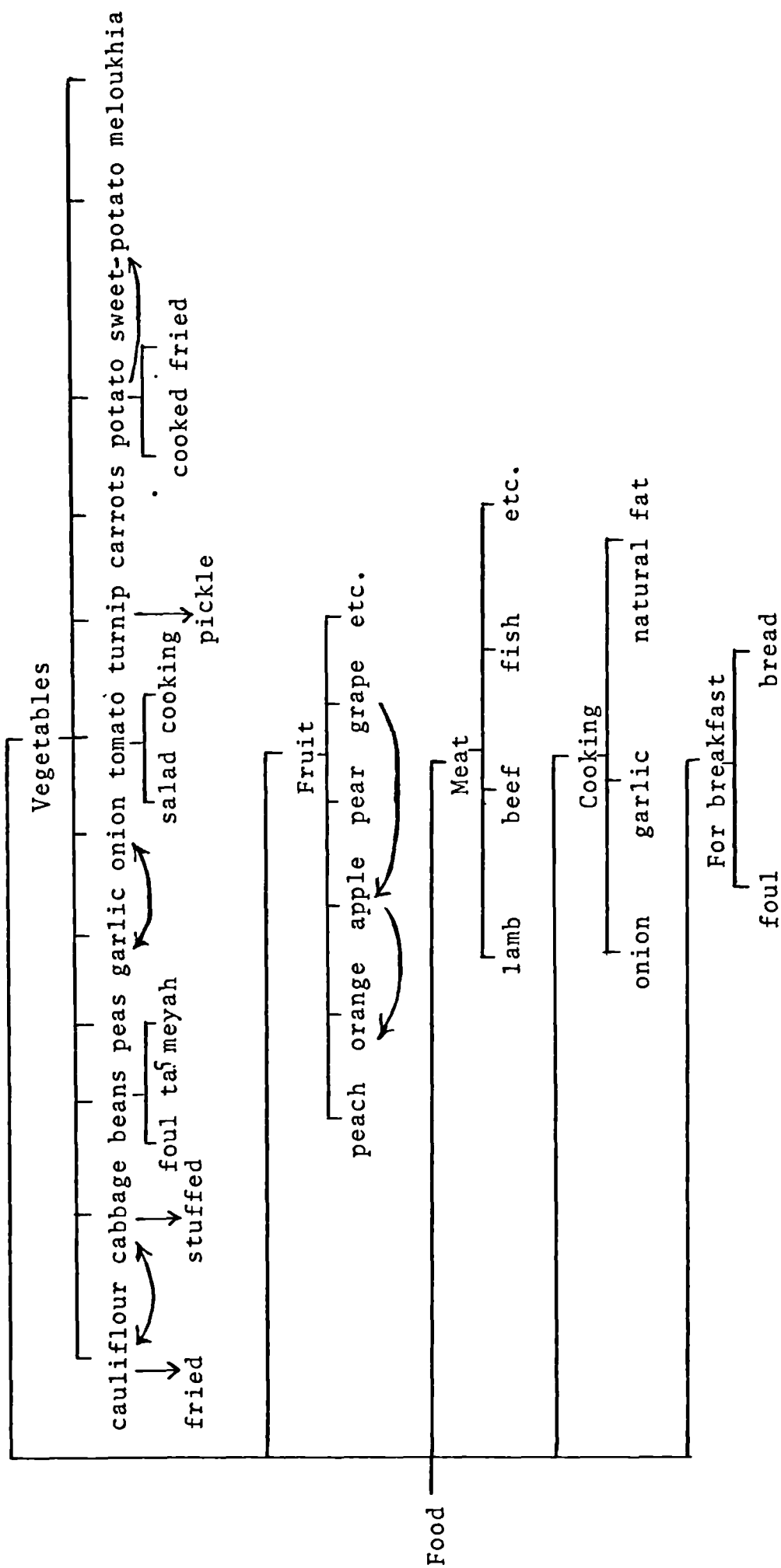


Diagram 10: English associative classification of food

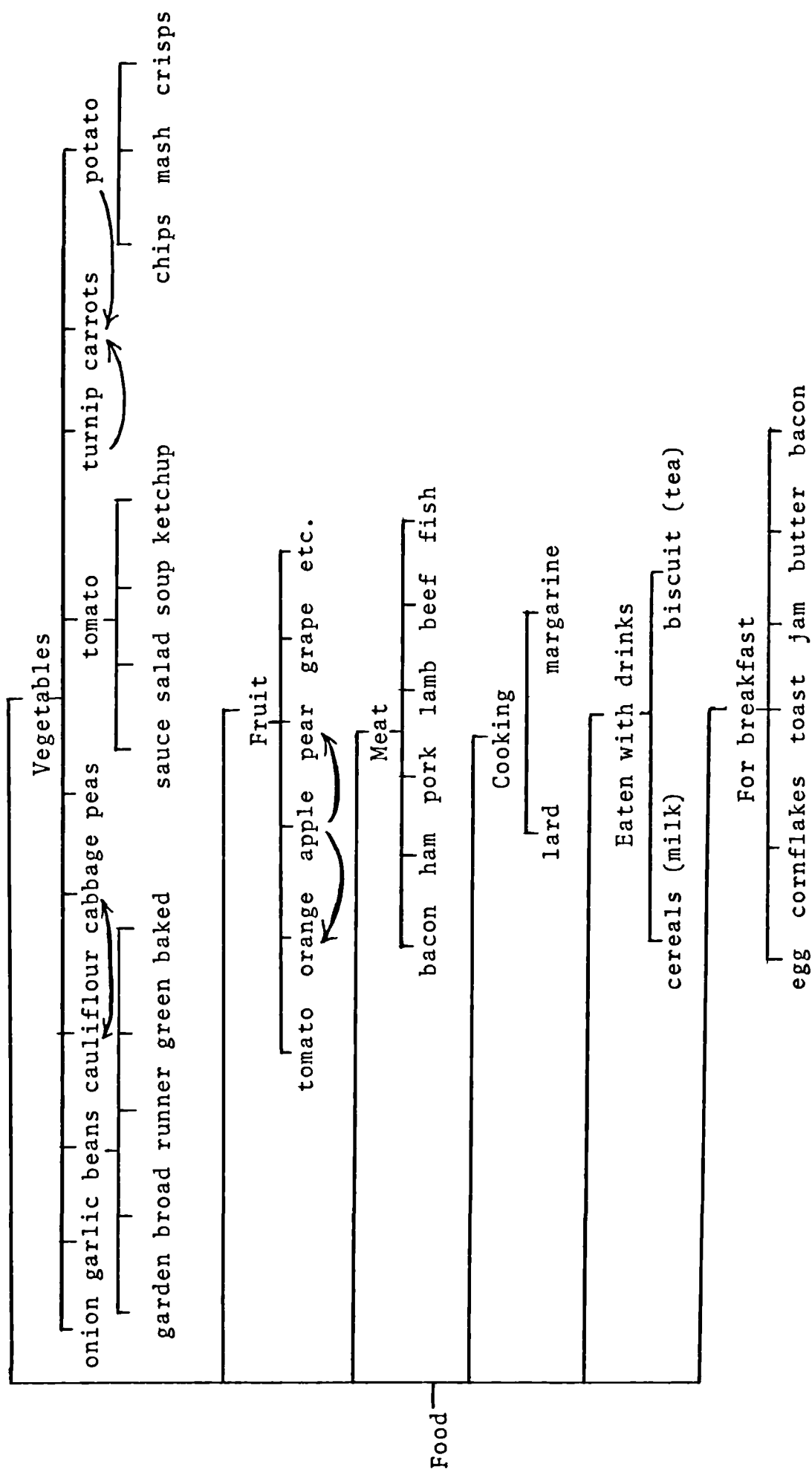
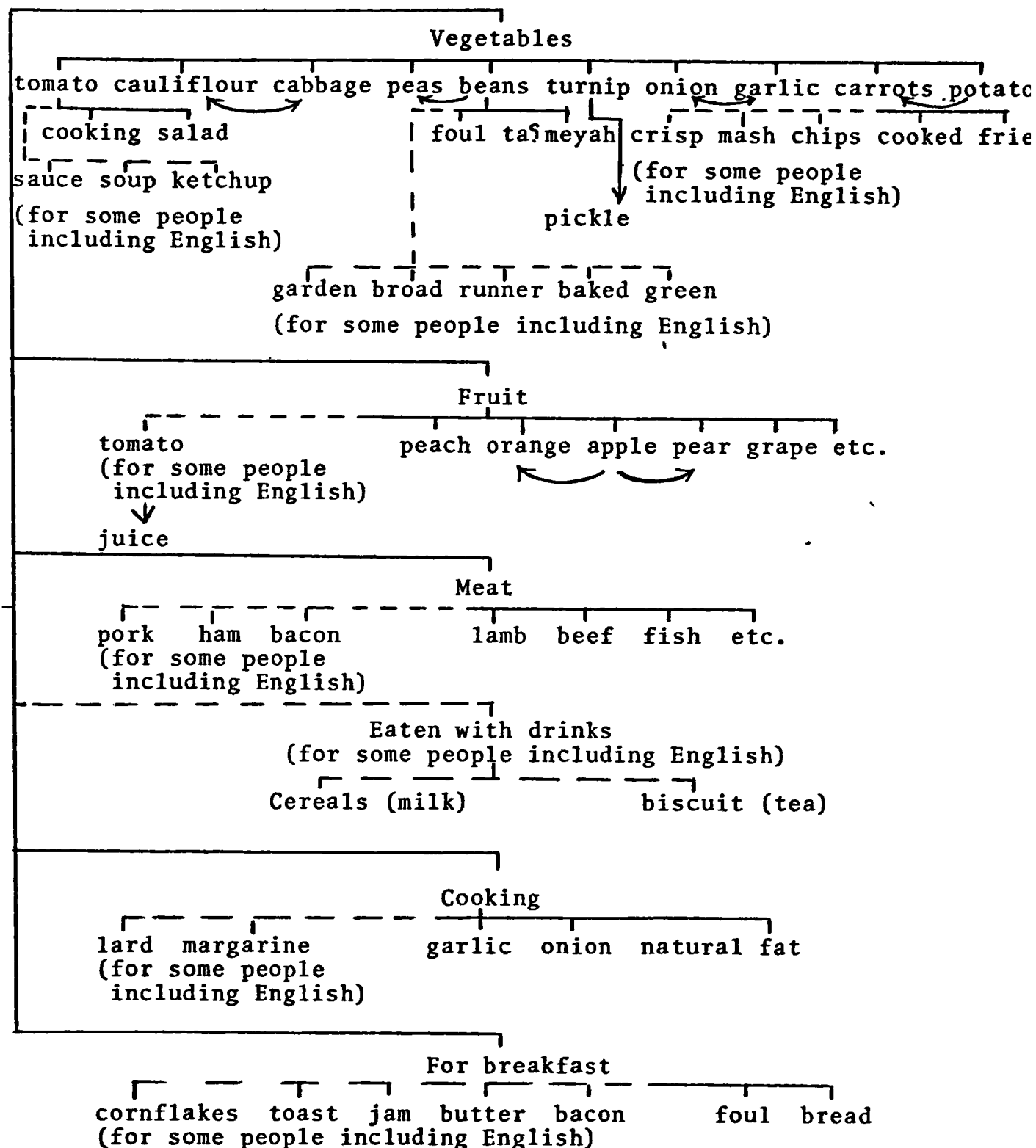


Diagram 11: Modified associative classification of foods



viewed "not as the acquisition of new knowledge and experience, but as an extension or alternative realization of what the learner already knows".

Thus word associations may help solve one of the problems of a communicative approach to language learning. "To see language purely in communicative terms is to diminish its effect as a facilitator of many other activities than communication. Even the relatively unsophisticated learner will need to develop skills other than those of straight communication, and will therefore need the opportunity to practise such skills" (Brumfit, 1978: 38).

Some of these skills include that of classifying and categorizing. But the classification and categorization will not be that of the native experience of the learner, but rather the experience of the foreign language. Hence, word associations may provide some aspects of this categorization. It is also worth noting that such skills are essential prerequisites for successful communication because participants should share a common categorization.

7.6 The Pedagogic Implementation of Associations

The following is not intended to cover every item in the data, but rather a representative sample of the data to show that the data may be helpful in the design of teaching materials.

It has been argued that the featural approach is an appropriate method for the implementation of associations. This argument is based on the following reasons:

(i) The featural approach has already been applied satisfactorily to word associations by McNeill (1966) and Clark (1972) as has been shown above.

(ii) From the pedagogic point of view, it has also proved to be useful. For example, Broughton (1976), using the multiple-choice technique, showed that the featural approach is of great potential value for foreign language teaching.

(iii) Recent research on semantic memory has given ample evidence that people store the lexicon featurally (Brown and McNeill, 1966). For a review see Herriot (1974).

I have argued in the discussion of Clark's paradigmatic rules that the minimal-contrast rule is sufficient to account for the bulk of associations in different form classes.

It is also my view that noun associations are pedagogically easier to be presented to the learners in terms of features. Verbs and adjectives may be difficult and confusing for the learners to grasp in terms of features. Thus, the featural approach, in relation to word association, may be pedagogically limited to noun associations. As for verbs and adjectives, they may be presented in terms of the form of a controlled word association test, e.g. asking for synonyms or antonyms.

On the other hand, taking into consideration the current status of the academic and professional qualifications of Egyptian teachers, any technique might serve the purpose.

The main purpose of exercises is to attract the Egyptian learners' attention to the English ways of categorising experience. This may be achieved by a variety of exercises: transformation exercises (i.e. transform masculine to feminine), dialogue, story, definitions, reporting, questions, comprehension, etc.

The teacher may also, depending on the learners' linguistic ability in English, develop a sort of discussion of the cultural differences underlying the points of the exercise.

It has been indicated above that components of meanings of stimuli may differ qualitatively or quantitatively in the two cultures. Hence, from the pedagogic point of view, it is not necessary to introduce all the components (responses) of stimuli to the learners. It is sufficient to present those components which reflect the real difference between the two cultures.

Exercise 1

It is observed that in the English sample, the kinship terms have an overwhelmingly high commonality of the primary responses which concentrated on the minimal contrast feature (+ male). An important

observation in the Egyptian responses is that 34.2% of the responses deal with affective features (kind, tenderness, love, etc.) which are almost absent from the English responses. Hence, the main task is to bring the focus, for the Egyptian learners, on the feature (+ male) only. This may be done as follows:

a) Simply, the teacher may list the "male" kinship terms: father, son, uncle, brother, and ask the learners to give their female equivalents.

b) Rearrange the following words in pairs, following the example given below: aunt, daughter, father, son, uncle, mother, brother, sister.

I	II
Father	Mother
.....
.....
.....

Following this, the teacher may ask the learners, Now, can you give the words in each column a "name" or a "title"? What do the words in the first column have in common? If there is no response from the learners, the teacher may proceed: You can see that all the words in the first column are "male". Now, can you say what all the words in the second column have in common?

The advantage of this type of exercise over the one in (a) is that it gives the learners some

"cognitive" work, i.e. they have to search themselves for the common and different feature and they have to name it.

Exercise 2

It has been shown that the environmental differences between the English and Egyptian cultures have led to a difference in associative clustering. For example, responses to "umbrella" reflect a functional difference. For the Egyptians it evoked: sun 30%, rain 14%, summer 8%; whereas for the English it evoked: rain 76%, sun 0%, summer 0%.

When Aly thought of visiting England, he asked his English friend John about the most important things he should take with him.

John to Aly: You should take an umbrella and a coat.

Aly (surprised): An umbrella and a coat! You must be joking!

John: No, I am serious.

Aly: When you say an umbrella, it means that the weather is sunny. In Egypt, as you know, we use the umbrella to protect ourselves from the hot sun. What is the coat for then?

John (laughing): In England we use the umbrella to protect ourselves from the rain. Most of the time it is raining and cold.

Aly: Oh, I didn't know that. Now I know what the coat is for.

This dialogue may be followed by a discussion about the weather in England and the weather in Egypt and its influence on the social life of people such as: clothing and housing, for example.

Exercise 3

When Aly was in London, John invited him for a drink.

John: Let's go to the pub and have a drink.

Aly: You know that I don't drink.

John: Yes, but you don't have to drink alcohol.

Aly: Do they serve tea or coffee?

John: No. They don't serve hot drinks in pubs.

But you may have a soft drink.

Aly: What do you mean by a "soft drink"?

John: A soft drink is a non-alcoholic drink such as coca-cola.

An exercise may follow this dialogue: Following the example below, put each of the following words under the appropriate column: beer, lemon, wine, orange juice, tomato juice, cocoa, sherry, pepsi, lager, champagne, whisky, etc.

I	II
Beer	Cocoa
....

Now, can you give each column a name or a title?

Exercise 4

The primary response to "cow" for both the English and Egyptians is "milk". For the English, the secondary response is "bull". It is absent from the Egyptian responses. To introduce this associate cluster it may be incorporated into a larger set as follows:

i) "Cow" is the grown female of the ox family.

Which is the grown male of the ox family?

a) bull b) calf c) pig.

Or ii) Put ticks in the boxes for the words which go together:

	Male	Grown	Young	Domestic	Female
Cow		✓		✓	✓
Bull	✓	✓		✓	
Calf			✓	✓	✓

Exercise 5

The primary English response to the stimulus "pig" was "sty". This associative cluster may be presented as follows:

a) Which word describes the "enclosure" of a pig?

i) house ii) fold iii) sty

or b) Which words go together:

	house	fold	sty	stable
Cow	✓			
Pig			✓	
Sheep		✓		
Horse				✓

Exercise 6

For the stimulus "meat", the English gave the responses: beef, pork, lamb, steak, and cow.

Which words go together:

	Cow	Bull	Sheep	Calf	Pig
Lamb			✓		
Bacon					✓
Beef	✓	✓			
Pork					✓
Veal				✓	
Ham					✓

Exercise 7

"Stool" and "armchair" were two frequent responses in the English responses and, of course, were absent from the Egyptian responses.

A "stool" is:

- a) an armchair
- b) a chair without arms
- c) a chair without a back
- d) a chair without arms and a back.

Exercise 8

"Margarine" and "lard" were two English responses to the stimulus "butter". They were also unknown to the Egyptians.

Put ticks in the boxes for the words which go together:

		pig fat	cream	vegetable fat
butter	is made from		✓	
lard		✓		
margarine				✓

Exercise 9

There are some differences between English and Arabic in "selectional restrictions". For example, as shown in the Egyptian responses, it can be said "to drink a cigarette". To attract the Egyptian learner's attention that this is not permissible in English, this form of exercise may be presented:

Which one do we not say in English?

- a) to drink tea
- b) to drink beer
- c) to drink a cigarette.

Exercise 10

Another difference in "selectional restrictions" is the verb "to rent". In the Egyptian responses to this stimulus, the following responses occur: flat, house, car, taxi. To bring the English selectional restrictions to this verb into focus for the Egyptian learner, the following exercise may be presented:

Put ticks for the words which go together:

	flat	car	house	taxi	shop	TV	concert hall	bicycle	horse
To rent	✓		✓		✓	✓			
To hire		✓		✓			✓	✓	✓

Exercise 11

The word "pictures" was the second English response with a frequency of 31.3% and was not among the Egyptian responses to the stimulus "cinema".

Which of the following means "cinema"

- a) photos
- b) TV
- c) paintings
- d) pictures.

Exercise 12

It has been indicated that the propositional characteristic of associations may be of great value from the pedagogic point of view. It may be made use of as a form of exercise as follows:

a) Each of the following words has some relation to the word "wine": drink, red, grapes, beer, dine, glass, dinner, drunk, cellar. Use each word with the word "wine" to make a meaningful sentence.

The aim of the exercise is to convey to the learner the full meaning of "wine" in the English culture. Thus, the exercise may be followed by a discussion simulated by the teacher to elaborate each sentence made by an explanation or addition. During this discussion the teacher may refer to the fact that in the English culture "wine" is not considered: a taboo, or harmful, or corrupting and only excessive drinking leads to drunkenness.

b) The exercise may be given in the form of a game: The teacher brings a small box on which the word wine is written. Inside the box there are some cards. On each card is written one word of the English associations to "wine" mentioned above. The teacher asks some pupils to pick these cards and form meaningful sentences.

The game may be presented as follows: This is a box. As you see, the word "wine" is written on the box. Inside the box there are some cards. Each card has a word on it. The word has some relation to the word "wine". I'll ask some of you to pick a card each. Then everyone has to make a meaningful sentence using the word on the card with the word "wine".

To take this game a step further, the sentences may be written down on the blackboard and with the help of the teacher those sentences may be developed to a short paragraph as an exercise in controlled-composition writing.

c) Another game may be presented in the following form: When Aly and John were in the English club they played a game. John brought two sheets of paper, one for himself and one for Aly. John said to Aly: "Let's play an interesting game. It's called: 'Can you guess what I am thinking of?'. First, we choose a word. Say, for example, 'wine'. Then, I say the word 'wine' to you. You write down one word that has some relation to this word (or write down the first word that

comes to your mind). Then you say the word 'wine' and I write down one word which has some relation to this word (or the first word that comes to my mind). We will repeat this several times. After this, we will exchange the sheets. I will read the words on your sheet and try to guess what you were thinking of each time I said the word 'wine'. You do the same thing."

On Aly's sheet, John found the words: taboo, drunkenness, beer, drinking, whisky, harmful, corruption, Christian and cabaret.

On John's sheet, Aly found the words: drink, red, grapes, beer, dine, glass, dinner, drunk and cellar.

Now, can you guess what were Aly and John thinking of?

The teacher may divide the blackboard into two sections. At the top of one section he writes: "John's thinking", and at the other section "Aly's thinking". Then he directs the learners to form meaningful sentences as indicated in the above exercises. The sentences are written down in the appropriate section.

The teacher may ask the learners certain questions in order to attract their attention to the fact that the word "wine" has different meanings for John and Aly. In other words the teacher has to enable the learners to know why their thinking is different from each other. This entails discussion of cultural differences.

Exercise 13 Differences in eating habits

Some of the English associations to "breakfast" are: cereal, cornflakes, toast, bacon and egg. Also the close association between "bread and butter" may be introduced.

Aly is back home from his visit to England. His teacher of English asked him to tell his classmates about the English way of life: customs, behaviour, social life, eating and drinking habits, etc.

Aly: Today I am going to tell you about some eating habits of the English people. We'll take, for example, English breakfast. As a matter of fact, English breakfast includes a variety of things: toast, butter, jam or marmalade, egg, sausage, cereal, tea or coffee.

Classmate A: What is toast?

Aly: Usually English bread is in the form of slices. These slices are made brown and crisp by heating. Sometimes the English people spread butter on the toast and eat it without adding anything.

Classmate B: What is cereal?

Aly: Any kind of grain such as: wheat, rice, maize, used in the form of flakes, for food. You add milk and sugar and it is ready for eating.

Classmate C: What is bacon, then?

Aly: This is salted or smoked meat from the back or sides of a pig. Usually it is served with egg or sausage.

Classmate D: English breakfast seems delicious and nutritious. I bet you didn't miss our "foul".

Aly (laughing): You are right. Now there is one important thing I should tell you. English people do not drink black tea (i.e. tea without milk). They add milk to it.

These types of exercise may be supplemented to the current courses of English in Egypt. Hence, it is possible to propose that these exercises and the theory behind them should be incorporated in the curriculum of Faculties of Education (English Departments).

They may also be supplemented to any course of English literature. It has been mentioned above that understanding a foreign language culture is a necessary prerequisite for the appropriate understanding and appreciation of the foreign language literature. These types of exercise may help learners to have some insight into those repetitive patterns which could be interpreted as significant and systematizable patterns of the culture and linguistic behaviour of the native speakers of the target language.

APPENDIX I

THE ENGLISH VERSION OF THE 'WAT

Please complete the following:

Name: _____ Age _____
School: _____ Sex: (Male - Female) _____

Instructions

Please read the following instructions carefully:
On the following sheets you will see a list of 250 words.
Please, read each word and in the space opposite to it write
the first word that it makes you think of.
Do not write sentences.
Do not skip any words.
Do not change any word you have written.
Work as fast as possible.
You have only 30 minutes, i.e. 7 seconds for each word.
Do not turn this sheet unless the Experimenter asks you.

Thank you.

(1)

No.	Word	Answer	No.	Word	Answer
1	Job		32	Moon	
2	Body		33	Potato	
3	Chair		34	to swim	
4	Meat		35	Book	
5	House		36	Foot	
6	Dog		37	Market	
7	Strong		38	Museum	
8	Bus		39	Blue	
9	to respect		40	to visit	
10	Suit		41	Health	
11	Sun		42	Father	
12	Wheat		43	Flower	
13	Football		44	Mouth	
14	Cinema		45	Nurse	
15	Apple		46	Cheese	
16	to sell		47	Marriage	
17	Tourist		48	Rabbit	
18	White		49	Bed	
19	Pain		50	Train	
20	River		51	Room	
21	Bell		52	to shut	
22	Family		53	Trousers	
23	to ride		54	Assistant	
24	Teacher		55	Bean	
25	Butter		56	Hut	
26	Carpet		57	University	
27	Cat		58	Cigarette	
28	Tent		59	to see off	
29	to build		60	Red	
30	Month		61	Sick	
31	Shirt		62	Government	

(2)

No.	Word	Answer	No.	Word	Answer
63	to buy		95	Radio	
64	Cotton		96	Question	
65	Story		97	Hospital	
66	Grape		98	Aeroplane	
67	Eye		99	Morning	
68	Engineer		100	Face	
69	Bread		101	Chocolate	
70	to wear		102	Camel	
71	Cow		103	Mosque	
72	Hotel		104	Ship	
73	Rain		105	to sleep	
74	Car		106	Society	
75	Dress		107	Sky	
76	to help		108	Blouse	
77	Cabbage		109	Onion	
78	Winter		110	Music	
79	Chess		111	Black	
80	to dance		112	Sister	
81	Green		113	Peace	
82	Time		114	to thank	
83	Leg		115	Scale	
84	Saleswoman		116	Tongue	
85	Joke		117	Worker	
86	to smoke		118	Blanket	
87	Deep		119	Pig	
88	Donkey		120	School	
89	Mother		121	Pyjamas	
90	West		122	to drink	
91	Hand		123	Eggplant	
92	Farmer		124	Bad	
93	to fear		125	to welcome	
94	Jam		126	Wool	

(3)

No.	Word	Answer	No.	Word	Answer
127	Fruit		158	City	
128	Son		159	Barber	
129	Justice		160	Round	
130	Heart		161	Uncle	
131	Sailor		162	Station	
132	to eat		163	Yellow	
133	Washing Machine		164	to succeed	
134	Lion		165	Milk	
135	Flat		166	Money	
136	Tea		167	Girl	
137	to invent		168	Breakfast	
138	Skirt		169	Guest	
139	Umbrella		170	Land	
140	Turnip		171	King	
141	Sincere		172	to drive	
142	Industry		173	Eating	
143	Neighbour		174	Examination	
144	Juice		175	Grocer	
145	Village		176	Cauliflower	
146	Street		177	to rent	
147	Wife		178	Woman	
148	Beer		179	Golden	
149	Trade		180	Horse	
150	to congratulate		181	Telephone	
151	Policeman		182	Generous	
152	Fish		183	to pray	
153	Hat		184	Birthday	
154	Garlic		185	Buffalo	
155	Insect		186	Brother	
156	Peach		187	Active	
157	Arm		188	Night	

(4)

No.	Word	Answer	No.	Word	Answer
189	Holiday		220	Wine	
190	Liver		221	Long	
191	Short		222	Door	
192	to fail		223	Science	
193	Ice		224	to punish	
194	Spring		225	Man	
195	Field		226	to cook	
196	Cup		227	Year	
197	Sweet		228	Happy	
198	Space		229	Unity	
199	Daughter		230	to write	
200	Newspaper		231	Beautiful	
201	Butcher		232	Coat	
202	Mind		233	People	
203	Bench		234	to celebrate	
204	Vegetable		235	Brave	
205	to travel		236	Entertainment	
206	Life		237	Taxi	
207	Bird		238	Child	
208	to play		239	Weak	
209	Servant		240	Television	
210	Coffee		241	Weapon	
211	War		242	Agreement	
212	Cloud		243	Tomato	
213	Desert		244	to wash	
214	Day		245	Biscuit	
215	to read		246	Problem	
216	Youth		247	Knife	
217	Friend		248	to laugh	
218	Wealth		249	Young	
219	Polite		250	to remember	

Thank you.

APPENDIX II

THE ARABIC VERSION OF THE WAT

"بسم الله الرحمن الرحيم"
 ~~~~~

املا البيانات الآتية من فضلك

|           |                       |
|-----------|-----------------------|
| الاسم :   | السن :                |
| المدرسة : | النوع ( ذكر- أنثى ) : |

### التعليمات

من فضلك " اقرأ التعليمات الآتية بدقة "

- \* ستجد على الصفحات التالية قائمة من الكلمات عددها ٢٥٠ كلمة
- \* اقرأ كل كلمة وفي الفراغ المقابل لها اكتب أول كلمة تخطر على بالك ..
- \* لا تكتب جملا ..
- \* لا تترك أى كلمة ..
- \* لا تغير أى كلمة بعد كتابتها ..
- \* اكتب بأسرع ما يمكن .. ف لديك نصف ساعة فقط .. أى حوالى ٧ ثوان لكل كلمة
- لا تقلب الصفحة من فضلك حتى يطلب منك ..

شكرا لك

| رقم | كلمة    | اجابة | رقم | كلمة  | اجابة |
|-----|---------|-------|-----|-------|-------|
| ١   | عمل     |       | ٢٣  | يرككب |       |
| ٢   | جسم     |       | ٢٤  | مدرس  |       |
| ٣   | كرسى    |       | ٢٥  | زبدة  |       |
| ٤   | لحم     |       | ٢٦  | سجادة |       |
| ٥   | بيت     |       | ٢٧  | قط    |       |
| ٦   | أتوبيس  |       | ٢٨  | خيمة  |       |
| ٧   | كلب     |       | ٢٩  | يبنى  |       |
| ٨   | قوى     |       | ٣٠  | شهر   |       |
| ٩   | يحترم   |       | ٣١  | قميص  |       |
| ١٠  | بدلة    |       | ٣٢  | قمر   |       |
| ١١  | شمس     |       | ٣٣  | بطاطس |       |
| ١٢  | قمح     |       | ٣٤  | يعوم  |       |
| ١٣  | كرة قدم |       | ٣٥  | كتاب  |       |
| ١٤  | سيلما   |       | ٣٦  | قدم   |       |
| ١٥  | تفاح    |       | ٣٧  | سوق   |       |
| ١٦  | يبسح    |       | ٣٨  | متحف  |       |
| ١٧  | سائح    |       | ٣٩  | أزرق  |       |
| ١٨  | أبيض    |       | ٤٠  | يزور  |       |
| ١٩  | ألم     |       | ٤١  | صحفة  |       |
| ٢٠  | نهر     |       | ٤٢  | أب    |       |
| ٢١  | جرس     |       | ٤٣  | زهرة  |       |
| ٢٢  | عائلة   |       | ٤٤  | فم    |       |

| رقم | كلمة    | اجابة | رقم | كلمة   | اجابة |
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| ٤٦  | جبلية   |       | ٦٧  | عين    |       |
| ٤٧  | زواج    |       | ٦٨  | مهلبس  |       |
| ٤٨  | أربب    |       | ٦٩  | خبز    |       |
| ٤٩  | سرب     |       | ٧٠  | يلبس   |       |
| ٥٠  | قطار    |       | ٧١  | بقرة   |       |
| ٥١  | حجرة    |       | ٧٢  | لوكاند |       |
| ٥٢  | يثلق    |       | ٧٣  | مطر    |       |
| ٥٣  | بنطالون |       | ٧٤  | عربة   |       |
| ٥٤  | مساعد   |       | ٧٥  | فستان  |       |
| ٥٥  | فول     |       | ٧٦  | يساعد  |       |
| ٥٦  | كوخ     |       | ٧٧  | كربب   |       |
| ٥٧  | جامعة   |       | ٧٨  | شواء   |       |
| ٥٨  | سيجارة  |       | ٧٩  | شطرنج  |       |
| ٥٩  | يودع    |       | ٨٠  | يرقص   |       |
| ٦٠  | أحمر    |       | ٨١  | أخضر   |       |
| ٦١  | مريض    |       | ٨٢  | وقت    |       |
| ٦٢  | حكومة   |       | ٨٣  | سباق   |       |
| ٦٣  | يشترى   |       | ٨٤  | بائعة  |       |
| ٦٤  | قطن     |       | ٨٥  | نكتة   |       |
| ٦٥  | قصّة    |       | ٨٦  | يدخن   |       |

| رقم | كلمة     | اجابة | رقم | كلمة    | اجابة |
|-----|----------|-------|-----|---------|-------|
| ٨٧  | عميق     |       | ١٠٨ | بلوزة   |       |
| ٨٨  | حمار     |       | ١٠٩ | بصل     |       |
| ٨٩  | أم       |       | ١١٠ | موسيقى  |       |
| ٩٠  | غرب      |       | ١١١ | أسود    |       |
| ٩١  | يعد      |       | ١١٢ | أخت     |       |
| ٩٢  | مزارع    |       | ١١٣ | سلام    |       |
| ٩٣  | يخالف    |       | ١١٤ | يشكر    |       |
| ٩٤  | مربي     |       | ١١٥ | ميزان   |       |
| ٩٥  | راديو    |       | ١١٦ | لسان    |       |
| ٩٦  | سواء     |       | ١١٧ | عامل    |       |
| ٩٧  | مستشفى   |       | ١١٨ | بطانية  |       |
| ٩٨  | طائفة    |       | ١١٩ | خنزير   |       |
| ٩٩  | صبح      |       | ١٢٠ | مدرسة   |       |
| ١٠٠ | وجه      |       | ١٢١ | بيجاما  |       |
| ١٠١ | شيكولاتة |       | ١٢٢ | يشرب    |       |
| ١٠٢ | جمال     |       | ١٢٣ | بازنجان |       |
| ١٠٣ | مسجد     |       | ١٢٤ | سريـر   |       |
| ١٠٤ | سفينة    |       | ١٢٥ | يرحب    |       |
| ١٠٥ | يلام     |       | ١٢٦ | صوف     |       |
| ١٠٦ | مجتمع    |       | ١٢٧ | فاكهة   |       |
| ١٠٧ | سماء     |       | ١٢٨ | ابن     |       |



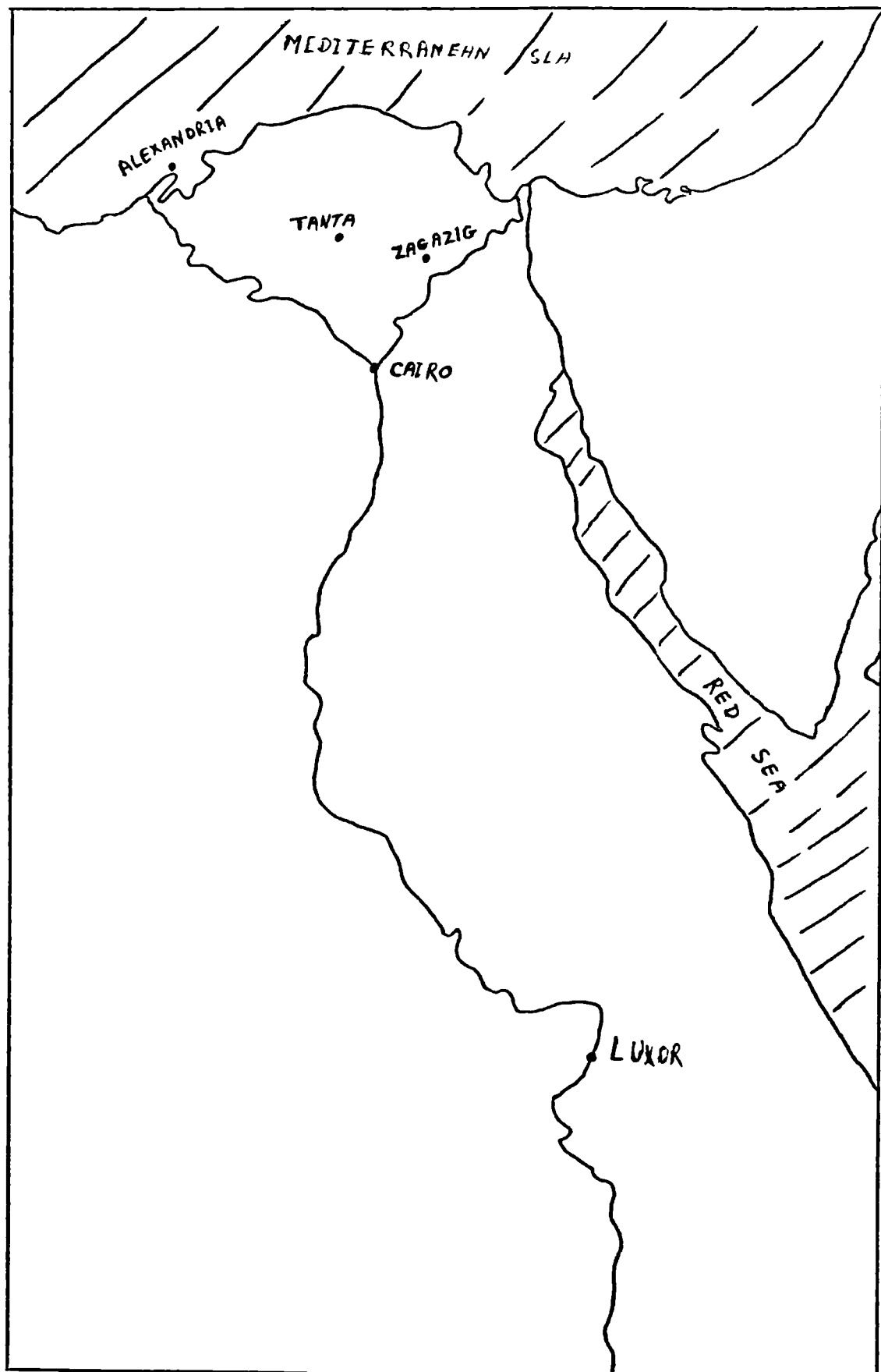
| رقم | كلمة         | اجابة | رقم | كلمة    | اجابة |
|-----|--------------|-------|-----|---------|-------|
| ١٢٩ | عدالة        |       | ١٤٩ | التجارة |       |
| ١٣٠ | قلب          |       | ١٥٠ | يهنئ    |       |
| ١٣١ | بحار         |       | ١٥١ | شرطى    |       |
| ١٣٢ | ياكل         |       | ١٥٢ | سمك     |       |
| ١٣٣ | غسالة كهربية |       | ١٥٣ | بريطة   |       |
| ١٣٤ | أسد          |       | ١٥٤ | ثوم     |       |
| ١٣٥ | شقة          |       | ١٥٥ | حشرة    |       |
| ١٣٦ | شاي          |       | ١٥٦ | خوخ     |       |
| ١٣٧ | يخترع        |       | ١٥٧ | ذراع    |       |
| ١٣٨ | جولسة        |       | ١٥٨ | مدينة   |       |
| ١٣٩ | مظلمة        |       | ١٥٩ | حلاق    |       |
| ١٤٠ | يفت          |       | ١٦٠ | مستدير  |       |
| ١٤١ | مخمس         |       | ١٦١ | علم     |       |
| ١٤٢ | صناعة        |       | ١٦٢ | محطة    |       |
| ١٤٣ | جار          |       | ١٦٣ | أصفر    |       |
| ١٤٤ | عصير         |       | ١٦٤ | يلجج    |       |
| ١٤٥ | قريبة        |       | ١٦٥ | لبن     |       |
| ١٤٦ | شارع         |       | ١٦٦ | نقود    |       |
| ١٤٧ | زوجة         |       | ١٦٧ | بست     |       |
| ١٤٨ | بيرة         |       | ١٦٨ | افطار   |       |

| رقم | كلمة      | اجابة | رقم | كلمة  | اجابه |
|-----|-----------|-------|-----|-------|-------|
| ١٦٩ | ذيفف      |       | ١٩٠ | كبدة  |       |
| ١٧٠ | أرض       |       | ١٩١ | قصير  |       |
| ١٧١ | ملك       |       | ١٩٢ | يفشل  |       |
| ١٧٢ | يقود      |       | ١٩٣ | تلج   |       |
| ١٧٣ | الاكسل    |       | ١٩٤ | رييح  |       |
| ١٧٤ | امتحان    |       | ١٩٥ | حقول  |       |
| ١٧٥ | بقال      |       | ١٩٦ | فجنان |       |
| ١٧٦ | قريبط     |       | ١٩٧ | حلو   |       |
| ١٧٧ | يوجر      |       | ١٩٨ | فذا   |       |
| ١٧٨ | امراة     |       | ١٩٩ | ابسة  |       |
| ١٧٩ | ذهبي      |       | ٢٠٠ | جريدة |       |
| ١٨٠ | حصان      |       | ٢٠١ | جنزار |       |
| ١٨١ | تليفون    |       | ٢٠٢ | عقل   |       |
| ١٨٢ | كريم      |       | ٢٠٣ | دكة   |       |
| ١٨٣ | يصلي      |       | ٢٠٤ | خضار  |       |
| ١٨٤ | عيد ميلاد |       | ٢٠٥ | يسافر |       |
| ١٨٥ | جامعة     |       | ٢٠٦ | حياة  |       |
| ١٨٦ | أخ        |       | ٢٠٧ | طائر  |       |
| ١٨٧ | شيط       |       | ٢٠٨ | يلعب  |       |
| ١٨٨ | ليل       |       | ٢٠٩ | خادم  |       |
| ١٨٩ | عطلة      |       | ٢١٠ | قهوة  |       |

| رقم | كلمة  | اجابة | رقم | كلمة     | اجابة |
|-----|-------|-------|-----|----------|-------|
| ٢١١ | حرب   |       | ٢٣٠ | يكتب     |       |
| ٢١٢ | سحاب  |       | ٢٣١ | جميل     |       |
| ٢١٣ | صحراء |       | ٢٣٢ | بالطو    |       |
| ٢١٤ | نهادر |       | ٢٣٣ | الناس    |       |
| ٢١٥ | يقرا  |       | ٢٣٤ | يحتفل    |       |
| ٢١٦ | شباب  |       | ٢٣٥ | شجاع     |       |
| ٢١٧ | صديق  |       | ٢٣٦ | ترفيه    |       |
| ٢١٨ | ثروة  |       | ٢٣٧ | تاكسي    |       |
| ٢١٩ | مؤدب  |       | ٢٣٨ | طفل      |       |
| ٢٢٠ | خمر   |       | ٢٣٩ | ضعيف     |       |
| ٢٢١ | طويل  |       | ٢٤٠ | تليفزيون |       |
| ٢٢٢ | باب   |       | ٢٤١ | سلاح     |       |
| ٢٢٣ | علوم  |       | ٢٤٢ | اتفاق    |       |
| ٢٢٤ | يعاقب |       | ٢٤٣ | طماطم    |       |
| ٢٢٥ | رجل   |       | ٢٤٤ | يغسل     |       |
| ٢٢٦ | يطبخ  |       | ٢٤٥ | هسكويست  |       |
| ٢٢٧ | سنة   |       | ٢٤٦ | مشكلة    |       |
| ٢٢٨ | سعيد  |       | ٢٤٧ | سكين     |       |
| ٢٢٩ | اتحاد |       | ٢٤٨ | يضحك     |       |
|     |       |       | ٢٤٩ | صغير     |       |
|     |       |       | ٢٥٠ | يتذكر    |       |

APPENDIX III

MAP OF EGYPT

MAP OF EGYPT

APPENDIX IV

THE ENGLISH ASSOCIATIVE NORMS

| <u>Response</u>                                                                            | <u>Frequency</u> | <u>Response</u>                                            | <u>Frequency</u> |
|--------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------|------------------|
| <u>Active</u>                                                                              |                  | <u>Aeroplane</u>                                           |                  |
| lively                                                                                     | 56               | fly                                                        | 143              |
| lazy                                                                                       | 35               | sky                                                        | 33               |
| inactive; alive; life                                                                      | 16               | crash                                                      | 19               |
| action                                                                                     | 14               | pilot                                                      | 17               |
| healthy; move; sport                                                                       | 13               | travel                                                     | 15               |
| energetic; run                                                                             | 12               | wing                                                       | 14               |
| live; slow                                                                                 | 11               | air; jet                                                   | 12               |
| play; still; movement;<br>alert                                                            | 9                | flight                                                     | 10               |
| anaesthetic; game;<br>dead                                                                 | 8                | flying                                                     | 9                |
| football; running;<br>energy; passive                                                      | 7                | transport; high                                            | 8                |
| invalid; moving; weak;<br>fit; dull                                                        | 6                | airport                                                    | 6                |
| volcano; quick; bright                                                                     | 5                | ship; Concorde                                             | 5                |
| work; busy; drag;<br>jump; radiation                                                       | 4                | boat; train; line                                          | 4                |
| sex; nurse; retired;<br>youth; keen; day;<br>youthful; tired                               | 3                | hostess; rocket; noise;<br>plane; jumbo; glider;<br>cruise | 3                |
| swim; yeast; fire;<br>watchful; success;<br>person; working;<br>nice; attractive;<br>night | 2                | clouds; kite; shipment;<br>hangar; freedom; speed          | 2                |
| Idiosyncraties                                                                             | 6                | Id                                                         | 16               |
|                                                                                            |                  | <u>Agreement</u>                                           |                  |
|                                                                                            |                  | disagree                                                   | 60               |
|                                                                                            |                  | agree                                                      | 40               |
|                                                                                            |                  | disagreement                                               | 30               |
|                                                                                            |                  | yes                                                        | 22               |
|                                                                                            |                  | treaty                                                     | 17               |
|                                                                                            |                  | argue; alliance                                            | 16               |

Agreement continued

|                                                                                               |    |
|-----------------------------------------------------------------------------------------------|----|
| shakehand                                                                                     | 13 |
| argument; peace;<br>decision; document                                                        | 11 |
| deal                                                                                          | 10 |
| sign; together;<br>paper                                                                      | 9  |
| true; settlement;<br>settle                                                                   | 7  |
| agreed; contract                                                                              | 6  |
| law; friends                                                                                  | 5  |
| signature; join;<br>consent; trade;<br>discuss; pact; faith                                   | 4  |
| tax; conversation;<br>fight; solved; war;<br>trust; solve; con-<br>dition; break;<br>marriage | 3  |
| political; dispute;<br>subject; save;<br>policy; people                                       | 2  |
| Id                                                                                            | 15 |

Apple

|              |    |
|--------------|----|
| orange       | 91 |
| pear         | 82 |
| fruit        | 82 |
| tree         | 28 |
| eat; core    | 19 |
| crisp        | 13 |
| green        | 10 |
| pie          | 5  |
| banana; bite | 4  |

Apple continued

|                                             |     |
|---------------------------------------------|-----|
| golden                                      | 3   |
| eating                                      | 2   |
| Id                                          | 24  |
| <u>Arm</u>                                  |     |
| leg                                         | 191 |
| hand                                        | 53  |
| elbow                                       | 16  |
| muscles                                     | 13  |
| body; chair                                 | 12  |
| wrist; shoulder                             | 9   |
| strong                                      | 7   |
| limb; feet                                  | 6   |
| long; fingers                               | 5   |
| length; wrestle; ache; crane                | 4   |
| sleeve; bone; palm; nail;<br>wrestling; law | 3   |
| police; farm; link; lift;<br>skin; pace     | 2   |
| Id                                          | 10  |
| <u>Assistant</u>                            |     |
| help                                        | 116 |
| helper                                      | 92  |
| shop                                        | 48  |
| manager                                     | 35  |
| secretary; aid                              | 9   |
| assist; shopkeeper                          | 4   |



Assistant continued

doctor; apprentice 3  
 job; helping 2  
 Id 38

Bad

good 260  
 rotten; naughty 11  
 ugly 8  
 cold; wrong 6  
 boy; weather; nasty 5  
 evil; egg; apple;  
   hurt; well; company;  
   smell; ill; news;  
   nice; horrible 2  
 Id 13

Barber

haircut 236  
 hair 58  
 shop 30  
 hairdresser 20  
 shave 7  
 snipper 3  
 man; wig; rabbit;  
   trim 2  
 Id 9

Bean

baked; peas 47  
 vegetable 33  
 runner 26  
 green 25  
 food 23  
 garden 10  
 broad; eat; stalk 9  
 grow; tin 7  
 seed; plant; Heinz;  
   tomato; soup 5  
 coffee; dinner; butter;  
   ship; cabbage; tourist;  
   potato; soya 4  
 roof; sauce; flower 2  
 Id 12

Beautiful

ugly 150  
 pretty 60  
 girl 27  
 nice 25  
 flowers 15  
 goodlooking; lovely 14  
 handsome; woman 9  
 spring; love; eyes 6  
 life; golden; wonderful 5  
 colourful; countryside 4

Beautiful continued

face; attractive; view;  
good; surroundings;  
colour 3

summer; butterfly;  
contest; creature;  
black; scenery;  
princess; hair;  
poetry; nature; art 2

Id 11

Bed

sleep 198

sex 30

blanket 21

sheet; room 16

pillow 12

breakfast 10

time; relax 6

rest; love; dream 5

night; enjoyment;  
cover; comfort 4

leg; soft; mattress;  
warm 3

spring; woman; side;  
comfortable; wife;  
spread; exciting; red 2

Id 19

Beer

drink 152

pub 53

drunk 19

Beer continued

wine; spirit 18

lager; hops; alcohol 14

froth 8

nice 7

party 6

whisky 5

bitter; barrel; expensive 4

thirst; glass; fear;  
lovely; pint; ale;  
skol; gin; head;  
refreshing; Whitbread;  
smoke; share; cocoa 3

can; brew; public house 2

Id 19

Bell

ring 161

church 47

noise 34

sound 19

ding dong 18

door; wedding 7

tower; home; time; crash 4

school; song; chime; bike;  
brass; loud; bell; bow 2

Id 34

Bench

|                                   |     |
|-----------------------------------|-----|
| seat                              | 125 |
| sit                               | 73  |
| park                              | 35  |
| wood                              | 28  |
| work                              | 25  |
| chair                             | 14  |
| stool; jury                       | 10  |
| table; wooden                     | 9   |
| metal; garden; beach              | 4   |
| tramp; sand; vice;<br>plain; hard | 3   |
| supply; sleep                     | 2   |
| Id                                | 17  |

Bird

|                  |    |
|------------------|----|
| fly              | 96 |
| sing             | 36 |
| prey             | 35 |
| girl             | 25 |
| sparrow          | 18 |
| wing; eagle      | 13 |
| tree; robin      | 12 |
| animal           | 10 |
| shy; nest        | 9  |
| flight; songs    | 7  |
| feathers; falcon | 6  |

Bird continued

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| cage; blue                                                                | 5  |
| grace; pigeon; eye; bush                                                  | 4  |
| beauty; black; dog;<br>beautiful; sweet;<br>singing; nightingale;<br>cook | 3  |
| life; watch                                                               | 2  |
| Id                                                                        | 16 |

Birthday

|                                                                                            |     |
|--------------------------------------------------------------------------------------------|-----|
| presents                                                                                   | 103 |
| happy                                                                                      | 43  |
| party                                                                                      | 28  |
| age                                                                                        | 25  |
| Christmas                                                                                  | 18  |
| cards                                                                                      | 13  |
| gift; cake; anniversary                                                                    | 11  |
| greetings; celebration                                                                     | 10  |
| celebrate                                                                                  | 9   |
| year; mine; fun                                                                            | 7   |
| older                                                                                      | 6   |
| suit; money; occasion                                                                      | 4   |
| circle; yearly; boys;<br>enjoy; candles; Easter;<br>months; receive; birth;<br>born; event | 3   |
| old; great; give                                                                           | 2   |
| Id                                                                                         | 11  |

Biscuit

|                                  |    |
|----------------------------------|----|
| tea                              | 80 |
| eat                              | 62 |
| food                             | 44 |
| crumbs                           | 39 |
| tin                              | 20 |
| chocolate                        | 19 |
| cake                             | 15 |
| crunchy; sweet;<br>cheese        | 11 |
| crunch; crispy                   | 9  |
| digestive                        | 8  |
| cream; packet; round;<br>cracker | 6  |
| break; snack                     | 5  |
| taste; shortcake                 | 4  |
| ginger; nice; dip                | 3  |
| cook; coffee                     | 2  |
| Id                               | 11 |

Black

|                                                      |     |
|------------------------------------------------------|-----|
| white                                                | 215 |
| dark                                                 | 14  |
| blue                                                 | 12  |
| night; death                                         | 11  |
| Sabbath; people; man;<br>colour; hair; music;<br>red | 8   |
| board                                                | 7   |

Black continued

|                                                                                                   |    |
|---------------------------------------------------------------------------------------------------|----|
| funeral; birds                                                                                    | 6  |
| power; dull                                                                                       | 5  |
| sinister; eyes                                                                                    | 4  |
| evil; hat; wag; sin                                                                               | 3  |
| magic; slaves; brown;<br>dancing; dirt; cloths;<br>darkness; beautiful;<br>negro; shy; roots; boy | 2  |
| Id                                                                                                | 17 |

Blanket

|                                     |    |
|-------------------------------------|----|
| warm                                | 98 |
| bed                                 | 97 |
| cover                               | 60 |
| warmth                              | 33 |
| sheet                               | 32 |
| electric                            | 15 |
| sleep; pillow                       | 9  |
| wet; cold                           | 5  |
| sleeping; mattress; woolly;<br>burn | 3  |

|                                                                     |   |
|---------------------------------------------------------------------|---|
| quilt; travel; sleeping-<br>bag; hotel; rug; thick;<br>fluffy; soft | 2 |
|---------------------------------------------------------------------|---|

Id

Blouse

|       |    |
|-------|----|
| shirt | 93 |
| skirt | 55 |

Blouse continued

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| buttons                                                                           | 33 |
| cloths                                                                            | 29 |
| girls                                                                             | 20 |
| white                                                                             | 16 |
| wear; cotton                                                                      | 15 |
| top                                                                               | 13 |
| dress; jumper                                                                     | 11 |
| tie; pretty; bra                                                                  | 8  |
| chemise; pullover                                                                 | 6  |
| cardigan; trousers                                                                | 5  |
| hose; nice; pattern;<br>chest                                                     | 4  |
| long; breasts; collar                                                             | 3  |
| cool; brown; yellow;<br>light; short; thin;<br>open; take off;<br>garment; colour | 2  |
| Id                                                                                | 19 |

Blue

|                                |    |
|--------------------------------|----|
| sky                            | 79 |
| red                            | 74 |
| green                          | 45 |
| colour                         | 41 |
| sea                            | 27 |
| black                          | 24 |
| white                          | 22 |
| yellow                         | 10 |
| pink; moon; sad                | 7  |
| films; Chelsea;<br>movies; May | 5  |

Blue continued

|                                   |    |
|-----------------------------------|----|
| cold; bell; jeans; flare          | 4  |
| water; beautiful; ocean;<br>river | 3  |
| broom; bedroom; stratos           | 2  |
| Id                                | 15 |

Body

|                           |    |
|---------------------------|----|
| arm                       | 55 |
| human                     | 45 |
| leg                       | 34 |
| person                    | 26 |
| head                      | 21 |
| skin                      | 15 |
| clothes; mind             | 11 |
| finger; limb; corpus      | 10 |
| biology; hair             | 9  |
| figure; flesh; sex        | 6  |
| male; bones; people; hand | 5  |

|                                                                    |    |
|--------------------------------------------------------------------|----|
| guard; man; soul; heart;<br>care; skeleton                         | 4  |
| function; shape; chest                                             | 3  |
| brain; structure; weight;<br>eye; veins; movement;<br>face; health | 2  |
| Id                                                                 | 25 |

Book

|                     |     |
|---------------------|-----|
| read                | 218 |
| worm                | 18  |
| words; pages; paper | 12  |

Book continued

|                                                       |    |
|-------------------------------------------------------|----|
| case; education                                       | 9  |
| text; shelf                                           | 7  |
| literature; novel;<br>write; pencil;<br>reading       | 5  |
| library; story                                        | 4  |
| to book; shop; bookie;<br>poem; comic; adven-<br>ture | 3  |
| hard book; teacher;<br>taken                          | 2  |
| Id                                                    | 21 |

Brave

|                                                   |    |
|---------------------------------------------------|----|
| coward                                            | 60 |
| hero                                              | 49 |
| courageous                                        | 45 |
| courage                                           | 30 |
| war                                               | 17 |
| strong; bold                                      | 15 |
| scared; weak                                      | 14 |
| men                                               | 11 |
| Indian; soldiers                                  | 10 |
| knight                                            | 8  |
| afraid; noble; feeble                             | 7  |
| lion; cowardice                                   | 6  |
| fear; good; rescue;<br>fearless; mighty;<br>tough | 5  |
| chicken; fighter; act;<br>cowardly                | 4  |

Brave continued

|                                                               |     |
|---------------------------------------------------------------|-----|
| handsome; medal; honour;<br>gate; leader; idiot;<br>horrified | 3   |
| Id                                                            | 11  |
| <u>Bread</u>                                                  |     |
| butter                                                        | 166 |
| water                                                         | 50  |
| dough                                                         | 19  |
| food                                                          | 18  |
| eat; yeast                                                    | 16  |
| jam; wheat                                                    | 12  |
| flour; loaf                                                   | 9   |
| slice                                                         | 8   |
| wine; bin                                                     | 5   |
| baker; crumb; toast; roll                                     | 4   |
| cheese; white; commodity;<br>cake; money; sandwich            | 3   |
| knife; milk; bakery; soft                                     | 2   |
| Id                                                            | 13  |
| <u>Breakfast</u>                                              |     |
| dinner                                                        | 71  |
| eat                                                           | 46  |
| food                                                          | 38  |
| cornflakes                                                    | 34  |
| morning                                                       | 26  |
| cereal                                                        | 24  |

Breakfast continued

|                                                 |    |
|-------------------------------------------------|----|
| tea                                             | 22 |
| eggs                                            | 19 |
| toast; bacon                                    | 16 |
| lunch; coffee; weatabix;<br>meal; milk          | 8  |
| bed; supper                                     | 6  |
| orange; corn; bread;<br>oats; grapefruit; wheat | 3  |
| happy                                           | 2  |
| Id                                              | 9  |

Brother

|                                                                                                               |     |
|---------------------------------------------------------------------------------------------------------------|-----|
| sister                                                                                                        | 281 |
| boy                                                                                                           | 14  |
| mother                                                                                                        | 13  |
| son                                                                                                           | 8   |
| family; friend                                                                                                | 5   |
| love                                                                                                          | 4   |
| hood; blood; male; ugly                                                                                       | 3   |
| glass; horrible; awful;<br>move; pest; security;<br>stupid; dislike; com-<br>panion; older; mate;<br>daughter | 2   |
| Id                                                                                                            | 11  |

Buffalo

|        |     |
|--------|-----|
| bull   | 149 |
| animal | 40  |

Buffalo continued

|                                          |    |
|------------------------------------------|----|
| cow                                      | 23 |
| cowboy                                   | 16 |
| bison                                    | 15 |
| Indian                                   | 14 |
| American                                 | 12 |
| meat; wild                               | 11 |
| horse; Spain; fierce                     | 8  |
| beast; zoo                               | 7  |
| horns; west; skin                        | 6  |
| African; kill                            | 5  |
| ox; herd; big                            | 4  |
| TV; beef; camel                          | 3  |
| springfield; endangered;<br>hair; shaggy | 2  |
| Id                                       | 3  |
| <u>To build</u>                          |    |
| house                                    | 88 |
| bricks                                   | 56 |
| make                                     | 50 |
| construct                                | 43 |
| erect                                    | 22 |
| work; construction                       | 11 |
| destory; demolish                        | 10 |
| knock down                               | 8  |
| fall down                                | 7  |
| flats; create; destruct                  | 6  |

To build continued

|                         |    |
|-------------------------|----|
| building; cement        | 5  |
| up; foundation; builder | 4  |
| grow; hut               | 2  |
| Id                      | 30 |

Bus

|                                               |     |
|-----------------------------------------------|-----|
| stop                                          | 146 |
| car                                           | 76  |
| transport                                     | 48  |
| red                                           | 25  |
| travel; train                                 | 16  |
| driver                                        | 12  |
| coach                                         | 11  |
| vehicle                                       | 10  |
| double-decker                                 | 8   |
| conductor                                     | 8   |
| taxi; station                                 | 6   |
| ride; fare; passenger;<br>people; queue; late | 2   |
| Id                                            | 17  |

Butcher

|               |     |
|---------------|-----|
| meat          | 245 |
| baker         | 37  |
| cut           | 19  |
| chops         | 16  |
| shop; chopper | 10  |

Butcher continued

|                                      |    |
|--------------------------------------|----|
| food; blood                          | 6  |
| kill                                 | 5  |
| slaughter; boy                       | 4  |
| cow; murder; knife                   | 3  |
| police; slice; beef;<br>grocer; cook | 2  |
| Id                                   | 12 |

Butter

|                                          |     |
|------------------------------------------|-----|
| bread                                    | 154 |
| margarine                                | 51  |
| milk; cheese                             | 31  |
| jam                                      | 14  |
| spread                                   | 12  |
| lard                                     | 9   |
| melt; yellow                             | 8   |
| cow; cream                               | 7   |
| egg                                      | 5   |
| greasy; food; fat                        | 4   |
| meat; dish; knife; eat;<br>cup; slippery | 2   |
| Id                                       | 20  |

To buy

|          |     |
|----------|-----|
| to sell  | 170 |
| purchase | 44  |
| money    | 42  |



To buy continued

|                                  |    |
|----------------------------------|----|
| get                              | 16 |
| spend                            | 13 |
| clothes; goods                   | 9  |
| food; receive; selling;<br>sale  | 6  |
| obtain; shop                     | 5  |
| bill; pay; consume;<br>expensive | 3  |
| trade; gain                      | 2  |
| Id                               | 13 |

Cabbage

|                                                                         |    |
|-------------------------------------------------------------------------|----|
| vegetable                                                               | 93 |
| green                                                                   | 70 |
| lettuce; cauliflower                                                    | 24 |
| food; carrots                                                           | 18 |
| eat                                                                     | 15 |
| leaf                                                                    | 14 |
| onion                                                                   | 10 |
| horrible; garden                                                        | 6  |
| smell; brussels; boiled;<br>white; potatoes; water                      | 5  |
| earth; sprouts; litter;<br>vinegar; field; taste-<br>less; rabbit; grow | 4  |
| radish; boiling; tomatoes;<br>nice                                      | 3  |
| rotten; mouth; spinach;<br>gravy                                        | 2  |
| Id                                                                      | 14 |

Camel

|                                               |     |
|-----------------------------------------------|-----|
| hump                                          | 154 |
| desert                                        | 106 |
| animal                                        | 20  |
| ride                                          | 12  |
| Arabia                                        | 10  |
| horse; zoo                                    | 9   |
| sand; donkey                                  | 7   |
| water; Arabs                                  | 6   |
| Kuwait; Africa                                | 5   |
| big; dung; ship; goat;<br>fags; train; travel | 3   |
| spit; transport; cow;<br>religion             | 2   |

|    |    |
|----|----|
| Id | 11 |
|----|----|

Car

|                                        |    |
|----------------------------------------|----|
| bus                                    | 35 |
| drive                                  | 31 |
| transport; travel                      | 22 |
| motorbike                              | 21 |
| engine                                 | 18 |
| wash                                   | 15 |
| wheels; vehicle                        | 11 |
| ride; lorry                            | 10 |
| van; crash                             | 9  |
| fast; road; seat                       | 8  |
| speed; traffic; garage;<br>Rolls Royce | 6  |

Car continued

|                                          |    |
|------------------------------------------|----|
| train; tyre                              | 5  |
| taxi; racing; park; walk;<br>motor       | 4  |
| comfort; petrol; door;<br>driver         | 3  |
| run; motorcycle; noise;<br>plane; moving | 2  |
| Id                                       | 28 |

Carpet

|                                                               |     |
|---------------------------------------------------------------|-----|
| floor                                                         | 146 |
| mat                                                           | 33  |
| rug                                                           | 30  |
| soft                                                          | 21  |
| stairs; wool                                                  | 12  |
| house                                                         | 9   |
| furniture                                                     | 8   |
| room; Hoover; fluffy;<br>piles; thread                        | 5   |
| luxury                                                        | 4   |
| chair; walk; red;<br>sweeper; car; broom;<br>lay; magic; roll | 2   |
| Id                                                            | 35  |

Cat

|       |     |
|-------|-----|
| dog   | 242 |
| mouse | 24  |

Cat continued

|               |    |
|---------------|----|
| animal        | 21 |
| fur           | 12 |
| pet           | 10 |
| furry         | 6  |
| rat           | 5  |
| fluffy        | 4  |
| bird; scratch | 3  |
| fish; kitten  | 2  |
| Id            | 30 |

Cauliflower

|                                                    |     |
|----------------------------------------------------|-----|
| vegetable                                          | 108 |
| cabbage                                            | 56  |
| white                                              | 28  |
| cheese                                             | 20  |
| food                                               | 16  |
| eat                                                | 12  |
| horrible; green; plant                             | 11  |
| grow; dinner                                       | 10  |
| garden; ears                                       | 7   |
| field; cook                                        | 5   |
| nice; roast beef; smell;<br>grocer; spud; potatoes | 4   |
| nasty; farm; earth;<br>rubbish                     | 3   |
| lettuce; meat; ground;<br>nice; turnip; yellow     | 2   |
| Id                                                 | 6   |

To celebrate

|                                                                        |    |
|------------------------------------------------------------------------|----|
| party                                                                  | 90 |
| drink                                                                  | 60 |
| birthday                                                               | 48 |
| happy                                                                  | 34 |
| enjoy                                                                  | 18 |
| congratulate                                                           | 16 |
| cheer; jubilee; anniversary                                            | 10 |
| fun; dance                                                             | 7  |
| occasion; wedding                                                      | 6  |
| toast; win; drunk; beer                                                | 5  |
| happiness; welcome; rejoice; friends; congratulation; marriage         | 4  |
| booze; candle; wish; joy; Christmas; merry; greetings; wine; champagne | 2  |
| Id                                                                     | 5  |

Chair

|                |     |
|----------------|-----|
| table          | 220 |
| sit            | 46  |
| seat; leg      | 31  |
| stool          | 18  |
| arm; furniture | 10  |
| wood; desk     | 9   |
| rest           | 7   |
| relax          | 4   |
| wooden         | 6   |

Chair continued

|                                              |     |
|----------------------------------------------|-----|
| sitting; cushion                             | 3   |
| Id                                           | 10  |
| <u>Cheese</u>                                |     |
| mouse                                        | 77  |
| bread                                        | 46  |
| butter                                       | 41  |
| milk                                         | 35  |
| Cheddar                                      | 21  |
| smell                                        | 14  |
| eat                                          | 12  |
| cake                                         | 11  |
| eggs; cow                                    | 8   |
| pickle; cracker; cream; food                 | 7   |
| yellow                                       | 6   |
| sandwich; toast                              | 5   |
| biscuit; spread; mice; rat; slice            | 4   |
| bacon; grated; tea; mould; beefberger; onion | 2   |
| Id                                           | 15  |
| <u>Chess</u>                                 |     |
| game                                         | 127 |
| draughts                                     | 71  |
| board                                        | 46  |
| boring                                       | 17  |

Chess continued

|                                                                                                         |    |
|---------------------------------------------------------------------------------------------------------|----|
| set                                                                                                     | 16 |
| backgammon; play                                                                                        | 12 |
| King; pieces; concentrate                                                                               | 7  |
| hard                                                                                                    | 6  |
| brain                                                                                                   | 5  |
| check; intelligence; loss                                                                               | 4  |
| champion; interesting                                                                                   | 3  |
| squares; enjoy; pass;<br>win; dominoes; match;<br>wood; Fisher; slow;<br>treasure; lose;<br>complicated | 2  |
| Id                                                                                                      | 8  |

Child

|                                      |    |
|--------------------------------------|----|
| baby                                 | 82 |
| young                                | 50 |
| adult                                | 45 |
| kid                                  | 23 |
| mother                               | 21 |
| small                                | 18 |
| children                             | 16 |
| parents; infants                     | 14 |
| care; cry                            | 9  |
| boy; play                            | 7  |
| little; school; man;<br>noise        | 6  |
| baby-sitting; grown-up;<br>innocence | 5  |

Child continued

|                                                                                                       |    |
|-------------------------------------------------------------------------------------------------------|----|
| sweet; bear; lovely;<br>girl; minder; inno-<br>cent; nursery; old;<br>adolescence; daughter;<br>youth | 3  |
| son; birth; human; eyes;<br>less; sex; pram; tears;<br>wife; married; person                          | 2  |
| Id                                                                                                    | 13 |

Chocolate

|                                    |     |
|------------------------------------|-----|
| sweet                              | 111 |
| eat                                | 38  |
| brown                              | 33  |
| bar                                | 24  |
| milk                               | 19  |
| nice                               | 16  |
| food                               | 12  |
| cake; Cadbury's;<br>fattening      | 11  |
| tasty; fat; coffee                 | 9   |
| box; plain; pudding;<br>dark       | 8   |
| biscuit; ice-cream                 | 6   |
| hot; delicious                     | 5   |
| nut; cocoa; taste; cream           | 4   |
| milky; machine; toffee;<br>wrapper | 3   |
| Easter; delicacy; egg;<br>dairy    | 2   |
| Id                                 | 5   |

| <u>Cigarette</u>                                      |     | <u>City</u>                                                    |     |
|-------------------------------------------------------|-----|----------------------------------------------------------------|-----|
| smoke                                                 | 190 | town                                                           | 133 |
| cigar                                                 | 30  | London                                                         | 69  |
| cancer                                                | 25  | village                                                        | 17  |
| fag                                                   | 21  | country                                                        | 13  |
| lighter                                               | 19  | big; busy; pollution                                           | 11  |
| smoking; death                                        | 10  | lights; large                                                  | 10  |
| light; ash                                            | 8   | people; noise; capital                                         | 9   |
| tar; smell                                            | 7   | crowded                                                        | 7   |
| bad; match                                            | 6   | shops; cars                                                    | 6   |
| lungs; rubbish; habit;<br>health                      | 4   | noisy; building;<br>industry; skyscraper                       | 5   |
| filth; nicotine                                       | 3   | offices; smoke;<br>environment; dirty;<br>centre               | 4   |
| tray; hate                                            | 2   |                                                                |     |
| Id                                                    | 23  | night; cathedral; neon                                         | 3   |
|                                                       |     | hate; zone; empire; wall;<br>flats; road; work;<br>fumes; loud | 2   |
| <u>Cinema</u>                                         |     | Id                                                             | 16  |
| film                                                  | 197 |                                                                |     |
| picture                                               | 113 | <u>Cloud</u>                                                   |     |
| theatre; entertainment                                | 9   | rain                                                           | 130 |
| screen; movies                                        | 6   | sky                                                            | 101 |
| camera; dark; watch;<br>enjoyment                     | 4   | white                                                          | 22  |
| Odeon; darkness; place;<br>look; amusement;<br>ticket | 2   | dust                                                           | 12  |
| Id                                                    | 24  | burst; sun                                                     | 9   |
|                                                       |     | smoke; snow                                                    | 8   |
|                                                       |     | weather; black; air                                            | 5   |

Cloud continued

|                                                                                       |   |
|---------------------------------------------------------------------------------------|---|
| sunny; cotton; dark                                                                   | 4 |
| dull; light; cover; grey;<br>cold; thunder; storm;<br>clear; misty; water;<br>puffing | 3 |
| star; flying; plane;<br>blue; high; wool; fly                                         | 2 |
| Id                                                                                    | 9 |

Coat

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| hat                                                                             | 80 |
| warm                                                                            | 65 |
| fur                                                                             | 31 |
| jacket                                                                          | 23 |
| wear                                                                            | 22 |
| rain                                                                            | 17 |
| cold                                                                            | 14 |
| clothes                                                                         | 13 |
| hanger; scarf                                                                   | 10 |
| warmth                                                                          | 8  |
| winter; heavy; leather                                                          | 6  |
| sheep; sheepskin;<br>clothing; blazer;<br>expensive; hang                       | 5  |
| cover; car                                                                      | 4  |
| skirt; dark; nice;<br>cardigan; gloves; dress;<br>blouse; over; buttons;<br>buy | 2  |
| Id                                                                              | 15 |

Coffee

|                                                                 |     |
|-----------------------------------------------------------------|-----|
| tea                                                             | 212 |
| drink                                                           | 42  |
| milk; morning                                                   | 10  |
| sugar; cup; break; beans                                        | 9   |
| expensive; black; nice                                          | 7   |
| bitter                                                          | 5   |
| cream; money                                                    | 4   |
| mate; mug; hat; strong                                          | 3   |
| Irish; Nescafe; white;<br>powder; Brazil; ground                | 2   |
| Id                                                              | 15  |
| <u>To congratulate</u>                                          |     |
| to thank                                                        | 49  |
| well done                                                       | 29  |
| happy                                                           | 27  |
| good                                                            | 17  |
| shake hand                                                      | 16  |
| wedding                                                         | 14  |
| welcome; wish luck                                              | 13  |
| celebrate                                                       | 11  |
| praise; cheer                                                   | 9   |
| thanks; marriage; party;<br>clap; applaud                       | 8   |
| congratulation; birthday                                        | 7   |
| receive; appreciation;<br>greetings; appreciate;<br>anniversary | 6   |

To congratulate continued

|                                                                                          |    |
|------------------------------------------------------------------------------------------|----|
| kiss; success; give;<br>encourage; win; greet                                            | 5  |
| engage; onwards; pleased;<br>present                                                     | 4  |
| people; console; smile;<br>certificate; card;<br>happiness; please;<br>admire; applause; | 3  |
| meet; sincere; love;<br>joyous; acknowledge                                              | 2  |
| Id                                                                                       | 12 |

To cook

|                                                     |     |
|-----------------------------------------------------|-----|
| food                                                | 130 |
| eat                                                 | 70  |
| bake                                                | 25  |
| chef                                                | 16  |
| meal                                                | 14  |
| oven                                                | 11  |
| bun                                                 | 10  |
| prepare                                             | 9   |
| boil; cake; stove; stew;<br>pans; kitchen           | 6   |
| eggs; cooker; pork; feed                            | 5   |
| hot; recipe; pots                                   | 4   |
| heat; fry; eating;<br>cookery; chips; menu;<br>meat | 3   |
| book; good; enjoy; make                             | 2   |
| Id                                                  | 12  |

Cotton

|                                                 |     |
|-------------------------------------------------|-----|
| wool                                            | 122 |
| clothes                                         | 28  |
| shirt                                           | 22  |
| needle                                          | 20  |
| reel; nylon                                     | 15  |
| material; thread                                | 12  |
| sew; plant                                      | 10  |
| fabric; dress                                   | 8   |
| linen; sheet                                    | 6   |
| buds; silk; yarn;<br>textile; mill              | 4   |
| sheep; white; thin;<br>mild; blouse             | 3   |
| Indian; field; industry;<br>garment; grow; ball | 2   |
| Id                                              | 21  |
| <u>Cow</u>                                      |     |
| milk                                            | 128 |
| bull                                            | 75  |
| moo                                             | 21  |
| sheep                                           | 20  |
| pig; animal                                     | 18  |
| field                                           | 16  |
| farm                                            | 13  |
| horse                                           | 10  |
| beef; grass                                     | 9   |

Cow continued

|                                                                             |   |
|-----------------------------------------------------------------------------|---|
| born; pasture                                                               | 6 |
| cattle; women                                                               | 5 |
| herd; eat; disease;<br>patches; food; dog;<br>sister; marrow; goat;<br>meat | 4 |
| calf; donkey; brown                                                         | 3 |
| bag; tree; house; bell;<br>rat; girl                                        | 2 |
| Id                                                                          | 4 |

Cup

|                               |     |
|-------------------------------|-----|
| saucer                        | 138 |
| tea                           | 129 |
| drink                         | 25  |
| coffee                        | 19  |
| football                      | 11  |
| win; mug                      | 8   |
| soup                          | 7   |
| milk; golden; world; glass    | 4   |
| winner; final; hold;<br>water | 3   |
| fill; round; fall; dew        | 2   |
| Id                            | 12  |

To dance

|       |    |
|-------|----|
| sing  | 47 |
| disco | 41 |

To dance continued

|                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------|----|
| music                                                                                                              | 38 |
| move                                                                                                               | 34 |
| enjoy                                                                                                              | 25 |
| fun                                                                                                                | 14 |
| floor; ball; enjoyable                                                                                             | 10 |
| party                                                                                                              | 9  |
| tango; ballet; singing;<br>step; enjoyment; hall                                                                   | 6  |
| jump; rock and roll;<br>records; ballroom;<br>entertainment                                                        | 5  |
| tourist; movement;<br>happy; walk; boogie                                                                          | 4  |
| harmony; shake; dancer;<br>toasting; slow; girls;<br>style; beverage;<br>pastime; fantastic                        | 3  |
| action; sneak out; lovely;<br>flower; feet; club;<br>fast; smooth; play;<br>room; round; two;<br>evening; pleasure | 2  |
| Id                                                                                                                 | 8  |

Daughter

|         |     |
|---------|-----|
| son     | 213 |
| girl    | 31  |
| mother  | 30  |
| sister  | 22  |
| brother | 14  |
| father  | 10  |



Daughter continued

|                                             |    |
|---------------------------------------------|----|
| love                                        | 8  |
| family                                      | 6  |
| child; trouble                              | 4  |
| spoil; devil; dad;<br>in-law; wife; protect | 3  |
| body; silly; cry; person                    | 2  |
| Id                                          | 10 |

Day

|                                                |     |
|------------------------------------------------|-----|
| night                                          | 270 |
| light                                          | 30  |
| hour                                           | 7   |
| week; long                                     | 6   |
| month                                          | 5   |
| dream                                          | 4   |
| dawn; sun; begin; ahead;<br>date; school       | 3   |
| diamond; work; period;<br>living; out; evening | 2   |
| Id                                             | 17  |

Deep

|         |    |
|---------|----|
| shallow | 94 |
| water   | 53 |
| sea     | 39 |
| down    | 24 |

Deep continued

|                                                                                                    |    |
|----------------------------------------------------------------------------------------------------|----|
| sleep                                                                                              | 23 |
| hole                                                                                               | 19 |
| purple                                                                                             | 15 |
| high                                                                                               | 9  |
| steep; valley                                                                                      | 7  |
| dark; depth; low; seaside                                                                          | 4  |
| lake; love; hollow; blue;<br>pressure; narrow; think;<br>feeling; big; darkness                    | 3  |
| ocean; mountain; danger;<br>ride; unclear; large;<br>snow; mystery; heat;<br>dive; die; far; empty | 2  |
| Id                                                                                                 | 7  |

Desert

|                                                                                |     |
|--------------------------------------------------------------------------------|-----|
| sand                                                                           | 148 |
| camels                                                                         | 38  |
| hot                                                                            | 29  |
| dry                                                                            | 25  |
| sun; island                                                                    | 12  |
| heat; Saharah                                                                  | 8   |
| Arabia; dust                                                                   | 6   |
| fox; Arabs; space;<br>drought                                                  | 5   |
| beach; rain; barren;<br>wind; oasis; palm-tree                                 | 4   |
| empty; vast; sea; yellow;<br>open-space; dull; land;<br>field; water; sky; fly | 3   |
| high; blue; ice-cream                                                          | 2   |
| Id                                                                             | 14  |

Dog

|            |     |
|------------|-----|
| cat        | 262 |
| animal     | 41  |
| bark       | 16  |
| pet        | 15  |
| bone       | 8   |
| friend     | 7   |
| collar     | 5   |
| tail       | 4   |
| mongrel    | 3   |
| hair; lead | 2   |
| Id         | 18  |

Donkey

|                                   |    |
|-----------------------------------|----|
| horse                             | 68 |
| ride                              | 65 |
| ass                               | 64 |
| mule                              | 51 |
| animal                            | 17 |
| kick                              | 15 |
| cart                              | 12 |
| pony; beach                       | 10 |
| Derby                             | 7  |
| stubborn; cow; seaside            | 6  |
| fool                              | 4  |
| chariot; senseless;<br>race; slow | 3  |

Donkey continued

monkey; neigh; stupid;  
ear; goods; dog; noise;  
Spain; sand; lazy;  
silly; transport 2

Id 8

Door

|             |     |
|-------------|-----|
| open        | 115 |
| shut        | 32  |
| window      | 30  |
| handle      | 29  |
| close       | 26  |
| knob        | 14  |
| house; bell | 10  |

knock; wooden 9

room; wood; entrance 7

closed; lock 6

slam; man 5

wait; way; bang 4

stop; floor; key 3

wall; out; front 2

Id 20

Dress

skirt 83

clothes 54

wear 27

Dress continued

|                                                                                           |    |
|-------------------------------------------------------------------------------------------|----|
| girl                                                                                      | 21 |
| trousers; pretty                                                                          | 15 |
| wedding                                                                                   | 11 |
| suit; up                                                                                  | 10 |
| coat; maker; party                                                                        | 9  |
| hat; nice; material;<br>smart                                                             | 8  |
| shirt; petticoat;<br>jumper; evening                                                      | 6  |
| long; zip                                                                                 | 5  |
| colourful; take off;<br>pattern                                                           | 4  |
| undress; window;<br>elegant; shop                                                         | 3  |
| garment; lady; sleeves;<br>socks; belt; shoes;<br>clean; get up; dance;<br>make up; woman | 2  |
| Id                                                                                        | 12 |

To drink

|                                                           |    |
|-----------------------------------------------------------|----|
| thirsty                                                   | 66 |
| eat                                                       | 45 |
| beer; water                                               | 29 |
| drunk                                                     | 27 |
| swallow                                                   | 22 |
| alcohol; pub                                              | 16 |
| tea; thirst                                               | 11 |
| guzzle; drink                                             | 8  |
| food; sip; refresh;<br>milk; lemonade;<br>beverage; party | 6  |

To drink continued

|                                                                                                               |    |
|---------------------------------------------------------------------------------------------------------------|----|
| whisky; cola; cool;<br>refreshed; car                                                                         | 4  |
| cider; taste; spill;<br>liquid                                                                                | 3  |
| cold; stomach; Martini;<br>lager; chocolate;<br>orange; sleep; relief;<br>wine; glass; down;<br>pint; consume | 2  |
| Id                                                                                                            | 11 |

To drive

|                                                                                                              |     |
|--------------------------------------------------------------------------------------------------------------|-----|
| car                                                                                                          | 192 |
| crash                                                                                                        | 23  |
| steer                                                                                                        | 15  |
| walk; ride                                                                                                   | 13  |
| in; driver                                                                                                   | 8   |
| along; roads; vehicle                                                                                        | 7   |
| go; fast; park                                                                                               | 6   |
| hard; tourist; people;<br>around; transport;<br>bus; travel; lorry;<br>skill; home                           | 4   |
| learn; slow; control;<br>drunk; journey; run;<br>licence; chauffeur;<br>motorboke; learner;<br>petrol; speed | 3   |
| stop; drink; kill;<br>careful; mad; country;<br>wheel                                                        | 2   |
| Id                                                                                                           | 5   |

| <u>To eat</u>           |     | <u>Eating continued</u>  |    |
|-------------------------|-----|--------------------------|----|
| food                    | 147 | taste; nourish;          |    |
| to drink                | 48  | consuming; hunger;       |    |
|                         |     | stomach; pleasure        | 3  |
| hungry                  | 26  | meat; sleeping; jam;     |    |
| chew                    | 12  | meeting; lunch; greedy;  |    |
|                         |     | pig; chips               | 2  |
| consume; munch; swallow | 11  | Id                       | 22 |
| hunger; meat            | 10  |                          |    |
| mouth; fat; nourish     | 7   | <u>Engineer</u>          |    |
| starve; stuff; munch    | 6   |                          |    |
| nourishment; fruit;     |     | cars                     | 56 |
| energy                  | 5   | worker                   | 37 |
| feed; stew; taste       | 4   | work                     | 34 |
| vegetable; fish; chips  | 3   | mechanics                | 22 |
| cake; kitchen; crunch;  |     | mechanical               | 23 |
| monger; live; plum;     |     | train; engines           | 18 |
| butter; gum; sandwich   | 2   | electrical               | 14 |
| Id                      | 3   | machines; industry;      |    |
|                         |     | technician               | 12 |
| <u>Eating</u>           |     | factory; tools; clever   | 9  |
| food                    | 152 | build                    | 8  |
| drinking                | 61  | craft; engineering       | 7  |
| hungry                  | 17  | skilled; spanner; grease | 6  |
| eat; digest             | 10  | motor; job; apprentice;  |    |
| full(up); munch         | 8   | telephone; power         |    |
|                         |     | station; communication   | 4  |
| habit; chew; munchy;    |     | physics; metal; labour;  |    |
| swallowing              | 6   | machinery; skill; plant; |    |
| dinner; fat; starving   | 5   | electronic; auto; steer; |    |
|                         |     | run; garage              | 3  |
| fattening; consume;     |     | fix; money               | 2  |
| calories; swallow       | 4   | Id                       | 11 |

| <u>Entertainment</u>    |     | <u>Examination</u> continued |    |
|-------------------------|-----|------------------------------|----|
| fun                     | 60  | nervous                      | 13 |
| show                    | 50  | doctor                       | 12 |
| music                   | 25  | result; pass                 | 10 |
| cinema                  | 24  | fail; school; marks          | 8  |
| enjoyment; enjoy        | 16  | score; GCE                   | 6  |
| disco                   | 16  | horrid; terrible;            |    |
| party; pictures         | 15  | horrible; fright;            |    |
| laugh                   | 10  | quiet; paper; study;         | 4  |
|                         |     | questions; silent            |    |
| club; sing; films;      |     | boring; hate; revise;        |    |
| dancing                 | 9   | undress; lost;               | 3  |
|                         |     | scared; fear; worried        |    |
| theatre; songs; TV      | 8   | revision; fees; learn;       |    |
| football; play; value;  |     | sitting; sweat; grade;       |    |
| laughter                | 7   | rest; book; effort;          |    |
| stage                   | 6   | inspect; intelligent;        |    |
|                         |     | bad; think; medical;         | 2  |
| exciting; singing;      |     | big room; difficult          |    |
| holiday                 | 5   | Id                           | 4  |
| comedy; entertain;      |     |                              |    |
| pleasure; dance; light; |     | <u>Eye</u>                   |    |
| concert; performer      | 4   |                              |    |
| movies; joke; Tommy     |     | see                          | 83 |
| Cooper; happy; records; |     | ball                         | 47 |
| amusing; amuse          | 3   | pupil                        | 32 |
| pass time; actors;      |     | nose                         | 28 |
| fiction                 | 2   | lashes                       | 20 |
| Id                      | 19  | look; lid; glasses           | 12 |
|                         |     | sight                        | 11 |
| <u>Examination</u>      |     | face; ear; liner;            |    |
| test                    | 151 | eyebrow                      | 8  |
| hard                    | 42  | head; to eye; shadow;        |    |
| work                    | 16  | makeup                       | 6  |

Eye continued

|                                    |    |
|------------------------------------|----|
| mouth; lip; vision                 | 5  |
| watch; view                        | 4  |
| mascara; seeing; round;<br>witness | 3  |
| black; body; toe                   | 2  |
| Id                                 | 15 |

Face

|                                                        |    |
|--------------------------------------------------------|----|
| nose                                                   | 57 |
| eyes                                                   | 38 |
| head                                                   | 32 |
| features                                               | 28 |
| complexion                                             | 21 |
| ugly                                                   | 18 |
| body                                                   | 15 |
| hair                                                   | 12 |
| mouth                                                  | 13 |
| make-up; look; wash;<br>pretty                         | 9  |
| mirror                                                 | 8  |
| skin; smile; round;<br>appearance; happy;<br>beautiful | 6  |
| reality; act; know;<br>nice; see                       | 5  |
| good-looking; ache; mask                               | 4  |
| moustache; foot                                        | 3  |

Face continued

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| human; teeth; pack;<br>neck; forward; anger;<br>dirty                                  | 2  |
| Id                                                                                     | 21 |
| <u>To fail</u>                                                                         |    |
| succeed                                                                                | 88 |
| pass                                                                                   | 53 |
| lose                                                                                   | 29 |
| exam                                                                                   | 25 |
| bad luck                                                                               | 15 |
| failure                                                                                | 13 |
| sad; win                                                                               | 11 |
| let down                                                                               | 10 |
| unlucky; cry                                                                           | 9  |
| unhappy; try again                                                                     | 8  |
| test                                                                                   | 7  |
| unsuccessful; unsucceed                                                                | 6  |
| disappointed; fall;<br>wrong                                                           | 5  |
| unable; miss; respect;<br>accomplish                                                   | 4  |
| hurt; stupid; success;<br>shame; late; useless;<br>end; forget; defeat;<br>spud; learn | 3  |
| weak; upset; achieve;<br>loser; sorry; failers;<br>miserable                           | 2  |
| Id                                                                                     | 12 |

Family

|                                             |    |
|---------------------------------------------|----|
| mother                                      | 57 |
| people                                      | 34 |
| parents                                     | 22 |
| home                                        | 18 |
| children                                    | 33 |
| togetherness                                | 14 |
| tree                                        | 15 |
| friend; group                               | 13 |
| relatives; brother                          | 12 |
| happy                                       | 11 |
| relations; love; happiness                  | 9  |
| house; sister                               | 5  |
| father; loving                              | 4  |
| large; boy; pride;<br>person; big; planning | 2  |
| Id                                          | 31 |

Farmer

|               |    |
|---------------|----|
| farm          | 66 |
| animals       | 35 |
| cows          | 32 |
| field         | 29 |
| pig; tractor  | 15 |
| wife          | 14 |
| sheep; plough | 13 |
| Giles; cattle | 12 |
| grow          | 10 |

Farmer continued

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| country; crops                                                        | 9  |
| mud; land; horses; house                                              | 8  |
| walker; wheat;<br>agriculture                                         | 5  |
| goat; shepherd                                                        | 4  |
| fork; man; dog; acre;<br>job; produce; hills;<br>harvest; maid; straw | 2  |
| Id                                                                    | 12 |

Father

|                        |     |
|------------------------|-----|
| mother                 | 282 |
| parent                 | 14  |
| dad                    | 13  |
| son                    | 12  |
| man                    | 8   |
| car; family; church    | 4   |
| head; money; Christmas | 3   |
| garden; love           | 2   |
| Id                     | 14  |

To fear

|            |    |
|------------|----|
| scared     | 75 |
| afraid     | 61 |
| frightened | 43 |
| fright     | 36 |
| hate       | 21 |

To fear continued

|                                                                                                                   |    |
|-------------------------------------------------------------------------------------------------------------------|----|
| worry                                                                                                             | 12 |
| horror                                                                                                            | 9  |
| brave                                                                                                             | 8  |
| God; terror                                                                                                       | 6  |
| dread; evil; courage; run                                                                                         | 5  |
| danger; beware; tremble;<br>kill; like                                                                            | 4  |
| heart; nice; care; scare;<br>unknown                                                                              | 3  |
| boy; scream; rats;<br>coward; dark; shield;<br>spider; to love; dislike;<br>detect; cry; hide;<br>Dracula; ghosts | 2  |
| Id                                                                                                                | 13 |

Field

|                                                            |     |
|------------------------------------------------------------|-----|
| grass                                                      | 115 |
| green                                                      | 32  |
| cow                                                        | 27  |
| grow                                                       | 13  |
| farm; crops; corn                                          | 12  |
| open; horse                                                | 9   |
| farmer; mud; hay                                           | 8   |
| land; bull                                                 | 7   |
| flowers; big; meadow;<br>animals; wheat; mouse;<br>country | 6   |
| nice; sheep; pigs; soil                                    | 5   |

Field continued

|                                                  |   |
|--------------------------------------------------|---|
| plants; football;<br>village; fence; land        | 4 |
| play; butterfly; picnic;<br>buttercup; vegetable | 3 |
| cabbage; bird; garden;<br>spring; hot            | 2 |
| Id                                               | 9 |

Fish

|                                                                     |    |
|---------------------------------------------------------------------|----|
| chips                                                               | 57 |
| sea                                                                 | 53 |
| swim                                                                | 31 |
| water                                                               | 27 |
| cod                                                                 | 24 |
| small                                                               | 17 |
| food                                                                | 14 |
| catch                                                               | 13 |
| fingers; hook                                                       | 11 |
| scale; net; eat                                                     | 9  |
| shark; cat; man                                                     | 8  |
| boat; haddock; meat;<br>herrings; rod                               | 6  |
| tank                                                                | 5  |
| fishing; fins; pike;<br>gold; river; pond                           | 4  |
| stink; monger; dog                                                  | 3  |
| plaice; bite; trip;<br>spell; sauce; cake;<br>live; crab; fisherman | 2  |
| Id                                                                  | 10 |





Foot continued

|                               |    |
|-------------------------------|----|
| head; fingers; march;<br>knee | 4  |
| nail; big                     | 3  |
| do; mouth                     | 2  |
| Id                            | 10 |

Football

|                                            |    |
|--------------------------------------------|----|
| game                                       | 97 |
| ball                                       | 27 |
| sport                                      | 25 |
| goal                                       | 21 |
| player                                     | 18 |
| Liverpool; netball;<br>play; match         | 11 |
| Rugby                                      | 10 |
| round; pitch                               | 8  |
| cricket; hockey                            | 7  |
| boot; team; field;<br>crowd                | 5  |
| club; Arsenal                              | 4  |
| playing; golf; hammers;<br>shorts; Chelsea | 3  |
| Tottenham; boring; TV;<br>stadium          | 2  |
| Id                                         | 27 |

Friend

|       |     |
|-------|-----|
| enemy | 103 |
| mate  | 36  |

Friend continued

|                                                              |    |
|--------------------------------------------------------------|----|
| foe                                                          | 32 |
| girl                                                         | 19 |
| neighbour                                                    | 17 |
| best                                                         | 14 |
| -ship                                                        | 11 |
| boy; nice; kind                                              | 10 |
| companion; help                                              | 9  |
| good; person                                                 | 8  |
| faith                                                        | 7  |
| brother; fellow; happy                                       | 5  |
| laugh; band; close                                           | 4  |
| helpful; helper; school;<br>friendly; companionship;<br>mend | 3  |
| cousin; hate; love                                           | 2  |
| Id                                                           | 13 |

Fruit

|                                     |     |
|-------------------------------------|-----|
| apple                               | 133 |
| vegetable                           | 36  |
| orange                              | 33  |
| trees; banana                       | 19  |
| eat                                 | 13  |
| salad; juice                        | 10  |
| grapes; pear; food;<br>peach; lemon | 8   |
| bowl; sweet                         | 7   |
| cake; vitamins                      | 5   |

Fruit continued

|                                                         |   |
|---------------------------------------------------------|---|
| tasty; fresh; nuts;<br>sun; cherries;<br>refreshment    | 4 |
| ripe; seed; grow; bread;<br>melon; pip; dry;<br>grocery | 3 |
| bad; plum; cup; nice;<br>pick; sweetness; acid          | 2 |
| Id                                                      | 5 |

Garlic

|                                                                                                                                            |    |
|--------------------------------------------------------------------------------------------------------------------------------------------|----|
| smell                                                                                                                                      | 92 |
| onion                                                                                                                                      | 33 |
| spices                                                                                                                                     | 24 |
| hot                                                                                                                                        | 23 |
| strong; horrible                                                                                                                           | 18 |
| French; salt                                                                                                                               | 14 |
| sausage; food                                                                                                                              | 12 |
| smelly; herb                                                                                                                               | 11 |
| devil                                                                                                                                      | 8  |
| Mr William                                                                                                                                 | 7  |
| flavouring; pepper                                                                                                                         | 6  |
| vegetable; taste; sauce;<br>seasoning; eat                                                                                                 | 5  |
| bitter; Irish; Dracula;<br>vampire; pickles;<br>flavour                                                                                    | 4  |
| spicy; breath; terrible;<br>foreign; stink; garnish;<br>grey; unusual; steak;<br>Italy; green; France;<br>nice; cooking; mustard;<br>nasty | 2  |
| Id                                                                                                                                         | 10 |

Generous

|                                                                                              |    |
|----------------------------------------------------------------------------------------------|----|
| kind                                                                                         | 55 |
| give                                                                                         | 48 |
| money                                                                                        | 45 |
| giving                                                                                       | 24 |
| helpful                                                                                      | 18 |
| good                                                                                         | 12 |
| tight; greedy; rich                                                                          | 11 |
| wealthy; plentiful; nice;<br>miser                                                           | 8  |
| help; people                                                                                 | 7  |
| grateful                                                                                     | 6  |
| mean; pay; Jewish                                                                            | 5  |
| happy; mad                                                                                   | 4  |
| thankful; thank;<br>enormous; charity;<br>lend; save; plenty;<br>person; share               | 3  |
| king; present; expensive;<br>accept; generosity;<br>spend; misery; prey;<br>give away; offer | 2  |
| Id                                                                                           | 9  |

Girl

|                                             |     |
|---------------------------------------------|-----|
| boy                                         | 285 |
| friend                                      | 29  |
| sex                                         | 8   |
| woman; sexy                                 | 6   |
| love; female                                | 5   |
| man; sister; dress;<br>family; pretty; nice | 3   |

| <u>Girl continued</u>                                                                                 |     | <u>Government</u>                                                                                         |     |
|-------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------|-----|
| feminine; lovely                                                                                      | 2   | parliament                                                                                                | 65  |
| Id                                                                                                    | 15  | politics                                                                                                  | 59  |
|                                                                                                       |     | rubbish                                                                                                   | 20  |
| <u>Golden</u>                                                                                         |     | democracy                                                                                                 | 18  |
| silver                                                                                                | 103 | M.P.                                                                                                      | 16  |
| egg                                                                                                   | 27  | prime minister                                                                                            | 14  |
| apple                                                                                                 | 18  | London; law; stupid                                                                                       | 10  |
| hair                                                                                                  | 16  | policy; country; trade;<br>parties                                                                        | 8   |
| brown; sun; gold; ring                                                                                | 13  | rule; useless; Mrs<br>Thatcher                                                                            | 7   |
| yellow                                                                                                | 12  | power; minister; labour                                                                                   | 6   |
| colour; corn; horse                                                                                   | 9   | poor; people                                                                                              | 5   |
| eagle; crisp; watch                                                                                   | 7   | helping; conservatives;<br>authority; council;<br>leaders; incompetent;<br>disorder; rotten;<br>important | 4   |
| crown; syrup; wheat;<br>wonder; goose                                                                 | 6   |                                                                                                           |     |
| star; bright; delicious                                                                               | 5   | control; nationalization;<br>Westminster; liars;<br>arguments; political;<br>bad; House of Commons        | 3   |
| precious; shot; Sunblest;<br>silence; ray; priceless;<br>sunshine; money                              | 4   | help; organizer; menage;<br>head; punishment; bossy;<br>reforms; in charge;<br>wrong; money; mess         | 2   |
| expensive; sparrow;<br>blond; bracelet; shiny;<br>jewelry; sunset;<br>honey; palomino;<br>opportunity | 3   | Id                                                                                                        | 7   |
| lion; ugly; Paris;<br>beach; pears; plate;<br>fleece; burnt; door;<br>arrow; hen                      | 2   |                                                                                                           |     |
| Id                                                                                                    | 8   | <u>Grape</u>                                                                                              | .   |
|                                                                                                       |     | fruit                                                                                                     | 147 |
|                                                                                                       |     | wine                                                                                                      | 56  |
|                                                                                                       |     | vine                                                                                                      | 40  |

Grape continued

|                                   |     |
|-----------------------------------|-----|
| apple                             | 28  |
| eat                               | 24  |
| pips                              | 11  |
| bunch                             | 8   |
| black; green                      | 7   |
| orange                            | 6   |
| banana; sweet                     | 5   |
| food; summer                      | 4   |
| red; prune; round                 | 3   |
| cherry; squash; juice;<br>nice    | 2   |
| Id                                | 17  |
| <u>Green</u>                      |     |
| grass                             | 118 |
| yellow                            | 37  |
| blue                              | 32  |
| colour                            | 19  |
| cabbage                           | 17  |
| red; apple                        | 15  |
| leaves                            | 14  |
| vegetables; trees                 | 13  |
| brown; beans                      | 7   |
| -wich; black; pens;<br>plant; man | 6   |
| orange; house; country-<br>side   | 4   |

Green continued

|                                                                  |    |
|------------------------------------------------------------------|----|
| pink                                                             | 3  |
| lettuce; fly                                                     | 2  |
| Id                                                               | 23 |
| <u>Grocer</u>                                                    |    |
| vegetable; green                                                 | 81 |
| fruit                                                            | 53 |
| food                                                             | 46 |
| shop                                                             | 23 |
| sell                                                             | 15 |
| store                                                            | 10 |
| butcher; cabbage;<br>grocery                                     | 7  |
| carrots; goods                                                   | 5  |
| tins; apple; bill; sale                                          | 4  |
| market; seller;<br>potatoes; trader;<br>bacon                    | 3  |
| shopkeeper; baker;<br>sprout; onion; shop<br>assistant; salesman | 2  |
| Id                                                               | 8  |
| <u>Guest</u>                                                     |    |
| friend                                                           | 75 |
| house                                                            | 52 |
| visitor                                                          | 42 |

Guest continued

|                                                                   |    |
|-------------------------------------------------------------------|----|
| honour                                                            | 18 |
| person                                                            | 17 |
| host                                                              | 16 |
| star                                                              | 14 |
| stay                                                              | 12 |
| invite                                                            | 11 |
| welcome; home                                                     | 10 |
| visit; hotel                                                      | 9  |
| people; dinner                                                    | 7  |
| relation; entertain                                               | 6  |
| companion; party;<br>company; lodger; aunt                        | 4  |
| sit; tea; kindness; rest                                          | 3  |
| stranger; land; polite;<br>pleasure; behaviour;<br>known; holiday | 2  |
| Id                                                                | 20 |

Hand

|                   |     |
|-------------------|-----|
| finger            | 143 |
| foot              | 60  |
| arm               | 40  |
| ball; body        | 9   |
| palm; writing     | 7   |
| glove; ring       | 6   |
| wrist; help; nail | 5   |
| leg; shake        | 4   |

Hand continued

|                                                                                        |     |
|----------------------------------------------------------------------------------------|-----|
| left; limb; right; off;<br>down; human; useful;<br>give; mouth                         | 3   |
| ful; bag; touch; head;<br>over; hold                                                   | 2   |
| Id                                                                                     | 17  |
| <u>Happy</u>                                                                           | .   |
| sad                                                                                    | 190 |
| unhappy                                                                                | 40  |
| birthday                                                                               | 35  |
| days                                                                                   | 25  |
| smile                                                                                  | 14  |
| laugh, joy                                                                             | 9   |
| gay                                                                                    | 6   |
| family; pleased; glad;<br>friendly                                                     | 5   |
| event; joyful; joke;<br>laughing; music; enjoy                                         | 4   |
| life; youth; cheerful;<br>joyous; gladness; good<br>luck; miserable;<br>laughter; nice | 3   |
| excited                                                                                | 2   |
| Id                                                                                     | 13  |
| <u>Hat</u>                                                                             |     |
| head                                                                                   | 117 |
| coat                                                                                   | 78  |

Hat continued

|                                            |    |
|--------------------------------------------|----|
| wear                                       | 24 |
| hair                                       | 15 |
| cap                                        | 11 |
| straw; top                                 | 10 |
| gloves; pin; scarf                         | 9  |
| trick; stand                               | 8  |
| party                                      | 6  |
| pretty; magic; feather;<br>mat; hood; big  | 4  |
| warm; wool; cover;<br>lovely; nice; bowler | 3  |
| ribbon; cloak; bonnet                      | 2  |
| Id                                         | 24 |

Health

|                                          |    |
|------------------------------------------|----|
| doctor                                   | 45 |
| ill                                      | 41 |
| well                                     | 28 |
| fit                                      | 26 |
| wealth                                   | 19 |
| good- sick                               | 18 |
| happiness                                | 11 |
| farm; illness                            | 9  |
| fitness; hospital;<br>weak; visitor      | 7  |
| smoking; cold; strong;<br>death; healthy | 6  |
| body; bad; centre                        | 4  |

Health continued

|                                                                  |    |
|------------------------------------------------------------------|----|
| die; clinic; sickness;<br>inspector; consultant;<br>cough; clean | 3  |
| dead; seen; state;<br>important; young;<br>prosperity            | 2  |
| Id                                                               | 25 |
| <u>Heart</u>                                                     |    |
| beat                                                             | 65 |
| love                                                             | 53 |
| lungs                                                            | 37 |
| blood                                                            | 30 |
| broken                                                           | 21 |
| body                                                             | 15 |
| kidney                                                           | 12 |
| liver; pump; soul                                                | 11 |
| ache; alive                                                      | 9  |
| brain; stomach; gold;<br>feelings                                | 6  |
| meat; attack; kind                                               | 5  |
| organ; string; stone                                             | 4  |
| good; life; hot                                                  | 3  |
| centre; kill; stop;<br>biology                                   | 2  |
| Id                                                               | 8  |

To help

|                                                                                                                                     |    |
|-------------------------------------------------------------------------------------------------------------------------------------|----|
| assist                                                                                                                              | 76 |
| aid                                                                                                                                 | 63 |
| old                                                                                                                                 | 17 |
| kind                                                                                                                                | 15 |
| people; save                                                                                                                        | 14 |
| give; helpful                                                                                                                       | 10 |
| assistant; care; good;<br>nurse                                                                                                     | 9  |
| nice; friendly                                                                                                                      | 7  |
| leave; hand                                                                                                                         | 5  |
| need; aged; fight;<br>reserve                                                                                                       | 4  |
| undo; service; comfort;<br>love; somebody; some-<br>one; others; minder;<br>help; carry; orphan;<br>generous; encourage;<br>injured | 3  |
| oblige; manage; doctor;<br>hinder; self; parents;<br>delay; you; work;<br>cross; me; understand;<br>lend; call; scheme              | 2  |
| Id                                                                                                                                  | 14 |

Holiday continued

|                                                                                                                                |    |
|--------------------------------------------------------------------------------------------------------------------------------|----|
| vacation; sea; Spain                                                                                                           | 17 |
| travel; beach                                                                                                                  | 13 |
| away; fun; camp                                                                                                                | 10 |
| tour; enjoy                                                                                                                    | 8  |
| time; trip                                                                                                                     | 7  |
| hotel; aeroplane;<br>resort                                                                                                    | 6  |
| sunshine; seaside; fly;<br>money; camping                                                                                      | 5  |
| visit; peace; long;<br>hotel; tourists;<br>sunbathing                                                                          | 4  |
| maker; caravan; boys;<br>brochure; cruise; life;<br>no school; end; event;<br>Italy                                            | 3  |
| heaven; happy; Wales;<br>pleasure; home;<br>France; Jamaica; sand;<br>festival; relax; Malta;<br>snaps; Cornwall;<br>enjoyable | 2  |
| Id                                                                                                                             | 7  |

HorseHoliday

|        |    |
|--------|----|
| rest   | 40 |
| abroad | 35 |
| summer | 27 |
| sun    | 21 |
| break  | 18 |

|              |    |
|--------------|----|
| ride         | 72 |
| donkey       | 33 |
| animal       | 21 |
| rider; pony  | 18 |
| cart         | 17 |
| saddle       | 14 |
| stable; shoe | 12 |



Horse continued

|                                                                                                                   |    |
|-------------------------------------------------------------------------------------------------------------------|----|
| neigh; race                                                                                                       | 11 |
| jump; gallop                                                                                                      | 9  |
| cow; fool; mare                                                                                                   | 7  |
| cowboy; jockey; hoof;<br>back; riding                                                                             | 6  |
| dog; Derby; head                                                                                                  | 5  |
| wooden; beauty; tail                                                                                              | 4  |
| zebra; meadow; beast;<br>gee gee; field;<br>station                                                               | 3  |
| brown; man; play;<br>woman; cat; meat;<br>cattle; run; mammal;<br>food; elephant; tramp;<br>sit; graceful; stupid | 2  |
| Id                                                                                                                | 9  |

Hospital

|                   |    |
|-------------------|----|
| nurse             | 87 |
| doctor            | 48 |
| ill               | 28 |
| patients; bed     | 24 |
| ambulance         | 18 |
| help              | 15 |
| ward              | 13 |
| sick              | 11 |
| illness; care     | 9  |
| accident; surgeon | 7  |
| operation         | 6  |

Hospital continued

|                                        |    |
|----------------------------------------|----|
| smell; medical; hurt;<br>clinic        | 5  |
| wing; health; clean;<br>pain           | 4  |
| injury; room; bandage;<br>death; blood | 2  |
| Id                                     | 14 |

Hotel

|                                                               |    |
|---------------------------------------------------------------|----|
| room                                                          | 67 |
| stay                                                          | 60 |
| holiday                                                       | 62 |
| motel                                                         | 24 |
| house                                                         | 18 |
| guest; restaurant                                             | 12 |
| manager; hostel                                               | 10 |
| place; accommodation                                          | 8  |
| tourist; service                                              | 6  |
| luxury; visit; agency;<br>expensive; flat                     | 5  |
| bill; live; suitcases;<br>residence; waitress;<br>guest house | 4  |
| resident; porter;<br>manage; board; waiter;<br>rich; cater    | 3  |
| rest; doorman; shelter;<br>sign; bed                          | 2  |
| Id                                                            | 17 |

House

|                                      |     |
|--------------------------------------|-----|
| home                                 | 108 |
| garden                               | 40  |
| flat                                 | 25  |
| live                                 | 24  |
| building                             | 16  |
| door                                 | 15  |
| shelter                              | 12  |
| furniture; bungalow                  | 11  |
| brick                                | 10  |
| roof; garage; chimney                | 9   |
| window; car; wall                    | 7   |
| room                                 | 6   |
| family; mouse; cat;<br>maison; hotel | 2   |
| Id                                   | 27  |

Hut

|                     |     |
|---------------------|-----|
| shed                | 102 |
| house               | 49  |
| wood                | 17  |
| shelter; mud; shack | 12  |
| rabbit              | 10  |
| roof; wooden        | 8   |
| live; cabin         | 7   |
| tent; home; room    | 6   |

Hut continued

|                                                |    |
|------------------------------------------------|----|
| camp; beach; village;<br>care; camping; jungle | 4  |
| door; small; lodge                             | 3  |
| fox; stone; stalk;<br>little; club; nut        | 2  |
| Id                                             | 31 |

Ice

|                        |     |
|------------------------|-----|
| cold                   | 165 |
| cream                  | 53  |
| snow                   | 30  |
| skating                | 20  |
| skate                  | 11  |
| frozen; rink; water    | 9   |
| to water; melt; fridge | 7   |
| cube                   | 6   |
| ski; drink; slippery   | 5   |

|                               |   |
|-------------------------------|---|
| shake; thick; heat;<br>freeze | 4 |
|-------------------------------|---|

|                                               |   |
|-----------------------------------------------|---|
| winter; slip; age; land;<br>solid; cool; berg | 3 |
|-----------------------------------------------|---|

|                        |   |
|------------------------|---|
| cocoa; fire; sea; show | 2 |
|------------------------|---|

|    |   |
|----|---|
| Id | 6 |
|----|---|

Industry

|      |     |
|------|-----|
| work | 131 |
|------|-----|

|         |    |
|---------|----|
| factory | 76 |
|---------|----|

Industry continued

|                                                                                                  |    |
|--------------------------------------------------------------------------------------------------|----|
| smoke                                                                                            | 13 |
| labour; machine                                                                                  | 12 |
| car; pollution; worker;<br>steel                                                                 | 9  |
| iron; money; agri-<br>culture                                                                    | 7  |
| job; industrial                                                                                  | 6  |
| metal; fuel                                                                                      | 5  |
| employment; Leyland;<br>raw material                                                             | 4  |
| coal; heavy; production;<br>profit; noisy; produce;<br>nationalized; chimney;<br>trade; business | 3  |
| government; export;<br>cotton; housing; dad;<br>build; progress; dirt;<br>electricity            | 2  |
| Id                                                                                               | 6  |

Insect

|              |    |
|--------------|----|
| ant          | 85 |
| fly          | 57 |
| spider       | 51 |
| small        | 31 |
| bee          | 22 |
| legs         | 17 |
| beetle; worm | 11 |
| crawly       | 9  |
| tiny; creepy | 8  |
| bacteria     | 7  |

Insect continued

|                                                                                       |    |
|---------------------------------------------------------------------------------------|----|
| creature; mice;<br>butterfly                                                          | 6  |
| grass; bite; moth;<br>animal                                                          | 4  |
| scream; disease; flea;<br>wings; twiggy; kill;<br>crawl; interesting;<br>little; gnat | 3  |
| move; nasty; horrible;<br>flowers; buzz; sting;<br>locust; malaria                    | 2  |
| Id                                                                                    | 11 |

To invent

|                                                         |    |
|---------------------------------------------------------|----|
| make                                                    | 87 |
| machine                                                 | 26 |
| discover                                                | 23 |
| think                                                   | 19 |
| create; design; profes-<br>sor                          | 16 |
| inventor                                                | 14 |
| clever; invention                                       | 10 |
| brains; idea; suggest;<br>skill                         | 8  |
| construct; scientist;<br>make up; produce               | 7  |
| something; destroy;<br>science                          | 5  |
| innovate; car; machinery;<br>famous; electric;<br>hero  | 4  |
| find; build; imagine;<br>blow-up; unique; brainy;<br>TV | 3  |

To invent continued

creative; object; 2  
measure; radio

Id 14

Jam

bread 91

strawberry 53

marmalade 37

butter 34

jar 29

sticky 20

tart; honey 13

eat; pot; sweet 10

tasty; traffic 8

sandwich; sick; pudding 7

fruit; red 6

toast; cream; black-  
currant; roll; bun;  
raspberry; crash;  
spread 3

apricot; food; Robinson 2

Id 9

Job

work 258

money 34

career 20

Job continued

employment 16

wages 6

hobby 4

employer; nurse 3

boy; help; nay; person 2

Id 28

Joke

laugh 177

funny 90

laughter 11

fun 10

trick 8

riddle; joker; smile 5

comedy; friends; lie 4

joking; jovial; trapped;  
amused; card 3

fool; embarrass; cartoon;  
game; pun; tell; gag;  
comic; like; batman;  
comedian 2

Id 15

Juice

orange 157

fruit 64

drink 48

Juice continued

|                                                 |    |
|-------------------------------------------------|----|
| lemon                                           | 24 |
| liquid                                          | 13 |
| sweet; apple                                    | 11 |
| pineapple                                       | 8  |
| tasty                                           | 5  |
| water; banana;<br>strawberry; drinking;<br>nice | 4  |
| lime; tomato; wet;<br>fresh                     | 3  |
| sour; bitter; grape;<br>squeeze                 | 2  |
| Id                                              | 5  |

Justice

|                                        |    |
|----------------------------------------|----|
| peace                                  | 96 |
| court                                  | 95 |
| law                                    | 37 |
| crime                                  | 12 |
| right                                  | 8  |
| jail                                   | 6  |
| good; prison; fair                     | 5  |
| guilty; urgent; just;<br>crown         | 4  |
| injustice; hate; wrong;<br>convict     | 3  |
| never; rubbish; honour;<br>truth; obey | 2  |
| Id                                     |    |

King

|                                                  |     |
|--------------------------------------------------|-----|
| queen                                            | 283 |
| crown; Kong; throne                              | 11  |
| rule; royal; Henry;<br>monarchy                  | 7   |
| ruler; Edward                                    | 5   |
| country; George; governor;<br>hero; strong; lord | 2   |
| Id                                               | 18  |

Knife

|                                         |     |
|-----------------------------------------|-----|
| fork                                    | 105 |
| cut                                     | 68  |
| sharp                                   | 42  |
| kill                                    | 34  |
| weapon                                  | 24  |
| blade                                   | 23  |
| stab                                    | 22  |
| dagger                                  | 8   |
| death                                   | 7   |
| sword                                   | 6   |
| spoon                                   | 5   |
| plate; meat; silver;<br>murder          | 4   |
| hurt; die; throat;<br>food; attack; gun | 2   |
| Id                                      | 11  |

| <u>Land</u>                                                          |    | <u>To laugh</u> continued                         |     |
|----------------------------------------------------------------------|----|---------------------------------------------------|-----|
| sea                                                                  | 93 | fun                                               | 21  |
| owner; grass                                                         | 18 | funny                                             | 16  |
| country                                                              | 16 | smile                                             | 14  |
| island; field; earth                                                 | 15 | sing                                              | 11  |
| own; farm                                                            | 14 | laughter                                          | 10  |
| acres; mark                                                          | 13 | joy; sad; titter                                  | 9   |
| tree; ground                                                         | 10 | comic; mock                                       | 5   |
| space; lord; lady                                                    | 8  | merry; stage; amusement;<br>teeth                 | 3   |
| property; moor; soul;<br>farmer; live; map;<br>green; scale; water   | 7  | happiness; voice; amuse                           | 2   |
| grow; aeroplane;<br>garden; scape                                    | 6  | Id                                                | 6   |
| area; hope                                                           | 5  | <u>Leg</u>                                        |     |
| take off; build; river;<br>private; universe;<br>England; sky; house | 4  | arm                                               | 117 |
| money; lover; sand;<br>rover                                         | 3  | foot                                              | 77  |
| wine; foreign; town;<br>society                                      | 2  | knee                                              | 20  |
| Id                                                                   | 14 | walk                                              | 18  |
|                                                                      |    | body                                              | 14  |
|                                                                      |    | limb                                              | 12  |
|                                                                      |    | toes; trousers; shoes                             | 10  |
| <u>To laugh</u>                                                      |    | muscles                                           | 7   |
| cry                                                                  | 90 | chair; ankle; meat                                | 6   |
| happy                                                                | 80 | hand; run; socks;<br>thigh; girl; person;         |     |
| joke                                                                 | 47 | woman; touch                                      | 4   |
| giggle                                                               | 30 | hips; human; bed; tights;<br>shape; back; eleven; |     |
| enjoy                                                                | 23 | skin; sexy                                        | 2   |
|                                                                      |    | Id                                                | 14  |

Life

|                                                                                                |     |
|------------------------------------------------------------------------------------------------|-----|
| death                                                                                          | 129 |
| live                                                                                           | 48  |
| long                                                                                           | 30  |
| dead                                                                                           | 13  |
| living; years                                                                                  | 12  |
| human; eternal; enjoy                                                                          | 8   |
| ambition; time                                                                                 | 6   |
| insurance; hard                                                                                | 5   |
| earth; born; good; die                                                                         | 4   |
| natural; struggle;<br>survival; exciting;<br>sound; end; boring;<br>free; span                 | 3   |
| flowers; limb; space;<br>great; love; line;<br>boy; misery; home;<br>heart; wonderful;<br>deaf | 2   |
| Id                                                                                             | 16  |

Lion

|             |    |
|-------------|----|
| tiger       | 92 |
| roar        | 40 |
| zoo; cat    | 22 |
| animal      | 17 |
| fierce      | 15 |
| tamer       | 12 |
| lioness     | 11 |
| heart; fear | 9  |

Lion continued

|                                                               |   |
|---------------------------------------------------------------|---|
| den; King; cub; jungle                                        | 7 |
| leopard; kill; death;<br>strength; furry;<br>growl; cage; fox | 5 |
| bear; anger; Saharah;<br>teeth                                | 4 |
| brave; eat; savage;<br>beast; man; dangerous;<br>unicorn      | 3 |
| tail; danger; bite;<br>violence; furious;<br>funny            | 2 |
| Id                                                            | 6 |

Liver

|                                 |     |
|---------------------------------|-----|
| kidney                          | 100 |
| bacon                           | 40  |
| heart; meat                     | 34  |
| sausage; body                   | 15  |
| pig; organ                      | 11  |
| steak                           | 10  |
| eat; food                       | 9   |
| pool                            | 8   |
| deep; blood                     | 7   |
| horrible; dinner; lungs         | 6   |
| onion; beef                     | 5   |
| butcher; lamb; taste;<br>animal | 4   |
| stomach; disease; joint         | 3   |

Liver continued

iron; protein; science;  
salt; plate 2  
Id 12

Long

short 230  
life 40  
tall 15  
hair; way 8  
time 7  
distance; pole; road;  
living; length; cold 4  
dress; big; day; far;  
book 3  
ruler; hairy; wait;  
string; fire; door;  
inch 2  
Id 24

Market

stall 58  
sell 50  
buy 38  
place 34  
shop 29  
sale; goods 20  
cheap 18  
Romford; shopping 12  
clothes; bargain 10  
auction; cattle; tour 6  
store; selling; crowd;  
noise; square; deep;  
fruit; garden 5  
items; day; produce;  
priced 4  
flowers; petticoat 3  
round; Friday 2  
Id 8

Man

woman 286  
boy 11  
girl; Adam; male 9  
human; dog 5  
ape; power; husband 4  
alive; beast; teacher;  
gate; fellow; mean;  
hunt; bones; mad;  
nice; body 2  
Id 21

Marriage

divorce 73  
love 50  
wedding 29  
church 26  
husband 23  
together 15  
couple 12  
happiness; children 11



Marriage continued

|                                                                 |    |
|-----------------------------------------------------------------|----|
| happy; family; wife                                             | 10 |
| sex; engagement                                                 | 7  |
| ring                                                            | 6  |
| bride; guidance                                                 | 4  |
| two; licence; girl;<br>people                                   | 3  |
| joining; age; comfort;<br>prison; sleep; give;<br>babies; avoid | 2  |
| Id                                                              | 26 |

Meat

|                                                          |    |
|----------------------------------------------------------|----|
| food                                                     | 99 |
| eat                                                      | 39 |
| beef                                                     | 31 |
| pork                                                     | 24 |
| lamb                                                     | 22 |
| cow                                                      | 20 |
| animal                                                   | 19 |
| butcher; fish                                            | 11 |
| steak                                                    | 7  |
| roast; ham; bacon                                        | 6  |
| potatoes; knife; pig;<br>flesh; dinner                   | 5  |
| tasty; red; cook                                         | 4  |
| blood; bones; gravy;<br>horse; joint; chicken;<br>hungry | 2  |
| Id                                                       | 16 |

Milk

|                                                                          |     |
|--------------------------------------------------------------------------|-----|
| cow                                                                      | 149 |
| honey                                                                    | 40  |
| drink                                                                    | 31  |
| white                                                                    | 30  |
| cream                                                                    | 12  |
| butter; cheese                                                           | 11  |
| tea; man                                                                 | 10  |
| bottle; baby                                                             | 8   |
| tits; sugar                                                              | 6   |
| vitamins; yoghurt                                                        | 5   |
| pudding; protein;<br>buffalo; sour; nice;<br>cool; hate; maid;<br>breast | 3   |
| good; dairy; drinking;<br>cat; silk; calcium;<br>tray                    | 2   |
| Id                                                                       | 12  |

Mind

|                                  |     |
|----------------------------------|-----|
| brain                            | 137 |
| think                            | 67  |
| body                             | 40  |
| thought                          | 35  |
| master                           | 20  |
| head                             | 10  |
| reader; heart; bender;<br>memory | 7   |
| soul; bend; intelli-<br>gence    | 6   |

Mind continued

|                                                             |    |
|-------------------------------------------------------------|----|
| you; read                                                   | 5  |
| people; games; matter;<br>voice; imaginative;<br>meditate   | 4  |
| deep; remember; clever;<br>thinking; dream;<br>change; step | 3  |
| dumb; absent; yours;<br>our; psychology; out                | 2  |
| Id                                                          | 15 |

Money

|                                                      |    |
|------------------------------------------------------|----|
| spend                                                | 60 |
| pound                                                | 47 |
| rich                                                 | 28 |
| buy                                                  | 22 |
| coins                                                | 19 |
| bank; wealth                                         | 15 |
| cash                                                 | 13 |
| pay; work                                            | 12 |
| purse                                                | 11 |
| need; power                                          | 10 |
| lots; honey                                          | 8  |
| shops; greed                                         | 7  |
| good; job; penny;<br>problem                         | 5  |
| poor; till; pocket;<br>mint; wallet; nice;<br>change | 4  |

Money continued

|                                                                                              |    |
|----------------------------------------------------------------------------------------------|----|
| wage; insurance; food;<br>wealthy; bankrupt;<br>price                                        | 3  |
| mad; heaps; present;<br>gold; lovely; father;<br>shortage; clothes;<br>gift; currency; horse | 2  |
| Id                                                                                           | 14 |

Month

|                    |     |
|--------------------|-----|
| year               | 178 |
| day                | 67  |
| week               | 66  |
| period             | 16  |
| time               | 11  |
| calendar           | 6   |
| century            | 4   |
| June, January, May | 2   |
| Id                 | 8   |

Moon

|               |     |
|---------------|-----|
| sun           | 152 |
| stars         | 42  |
| planet; space | 26  |
| earth         | 24  |
| might         | 22  |
| sky           | 18  |

Moon continued

|                |    |
|----------------|----|
| light          | 12 |
| rocket         | 11 |
| shine          | 10 |
| bright; Appolo | 4  |
| orbit; round   | 2  |
| Id             | 37 |

Morning

|                                                      |    |
|------------------------------------------------------|----|
| night                                                | 87 |
| afternoon                                            | 80 |
| evening                                              | 61 |
| breakfast                                            | 15 |
| tea                                                  | 14 |
| day                                                  | 12 |
| coffee                                               | 11 |
| dawn; dew; awake                                     | 10 |
| early; sun; bed                                      | 7  |
| birds; rushing around                                | 6  |
| tired; wake up; get up                               | 5  |
| break; light; sunrise                                | 3  |
| start; cloud; dusk;<br>beginning; goodbye;<br>school | 2  |
| Id                                                   | 10 |

Mother

|                                             |     |
|---------------------------------------------|-----|
| father                                      | 232 |
| children                                    | 24  |
| baby; woman; sister                         | 9   |
| care; love; daughter                        | 8   |
| mum; parent                                 | 6   |
| good; pleasant                              | 4   |
| lovely; food; cook;<br>family; kitchen; day | 2   |
| Id                                          | 17  |

Mouth

|                     |     |
|---------------------|-----|
| teeth               | 114 |
| tongue              | 58  |
| lips                | 37  |
| nose                | 28  |
| eat                 | 29  |
| speak               | 17  |
| kiss                | 13  |
| talk; food          | 11  |
| open; big           | 10  |
| eyes; chew          | 7   |
| face; ears; lick    | 5   |
| river; throat; shut | 4   |
| speech; butterfly   | 3   |
| head; red           | 2   |
| Id                  | 11  |

Museum

|                                                            |    |
|------------------------------------------------------------|----|
| old                                                        | 91 |
| history                                                    | 48 |
| ancient                                                    | 35 |
| antiques                                                   | 23 |
| statues                                                    | 15 |
| art                                                        | 10 |
| items                                                      | 9  |
| historic; interesting;<br>boring                           | 8  |
| look at; monuments;<br>collection; tourists;<br>animal     | 7  |
| pieces; prehistoric                                        | 6  |
| silence; bones; look;<br>age; cars; London;<br>place; past | 5  |
| objects; mummy; science;<br>quiet; visit; good             | 4  |
| castle; sculpture; money;<br>Greenwich; mud                | 2  |
| Id                                                         | 21 |

Music continued

|                                                                                                                                                                      |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| rock & roll; nice                                                                                                                                                    | 11 |
| loud; pop; popular                                                                                                                                                   | 10 |
| sing                                                                                                                                                                 | 9  |
| song; black                                                                                                                                                          | 8  |
| joy; love                                                                                                                                                            | 7  |
| beauty; classic; guitar;<br>Mozart                                                                                                                                   | 6  |
| soothing; piano; drum;<br>instrument; art; hear;<br>joke; centre; melody;<br>stereo; fantastic                                                                       | 5  |
| great; violin; entertain-<br>ment                                                                                                                                    | 4  |
| show; harmony; soft;<br>happy; singing; enjoy;<br>enjoyment                                                                                                          | 3  |
| orchestra; exciting;<br>status; relax; sad;<br>dancing; player;<br>pleasing; soul; jazz;<br>super; peaceful; sweet;<br>opera; lesson; boring;<br>hard; rubbish; good | 2  |
| Id                                                                                                                                                                   |    |

Music

|               |    |
|---------------|----|
| dance         | 35 |
| sound         | 32 |
| record        | 28 |
| noise; play   | 19 |
| listen; radio | 18 |
| notes         | 16 |
| relaxation    | 12 |

Neighbour

|                  |     |
|------------------|-----|
| friend           | 168 |
| next door        | 65  |
| nosey            | 21  |
| house            | 16  |
| friendly         | 13  |
| hate; love; hood | 12  |
| help; good       | 11  |

Neighbour continued

|                                               |   |
|-----------------------------------------------|---|
| beside                                        | 8 |
| nasty; kind                                   | 6 |
| people; woman; relatives                      | 4 |
| bad; secret; gossip                           | 3 |
| talk; fellow; hallo;<br>busy; dog; close; old | 2 |
| Id                                            | 6 |

Newspaper

|                                                  |     |
|--------------------------------------------------|-----|
| read                                             | 118 |
| news                                             | 54  |
| print                                            | 35  |
| The Sun                                          | 19  |
| magazine                                         | 14  |
| round                                            | 12  |
| headline; article                                | 10  |
| Mirror; daily; writing                           | 8   |
| agents; story; reader                            | 7   |
| reporter; boy; paper;<br>press                   | 5   |
| editor; time; shops;<br>sport; information       | 4   |
| reading; words; world;<br>report; comic; records | 3   |
| dirty; dog; gossip                               | 2   |
| Id                                               | 5   |

Night

|                                   |     |
|-----------------------------------|-----|
| day                               | 190 |
| morning                           | 34  |
| dark                              | 33  |
| sleep                             | 23  |
| moon                              | 11  |
| star                              | 9   |
| bed                               | 8   |
| club; mars; time                  | 7   |
| darkness; might; evening;<br>life | 5   |
| sex; nurse; armour;<br>fun; light | 4   |
| bird; fall; rest; dance           | 3   |
| Id                                | 9   |
| <u>Nurse</u>                      |     |
| doctor                            | 188 |
| hospital                          | 62  |
| help                              | 17  |
| care                              | 13  |
| patient                           | 9   |
| sister; maid                      | 8   |
| aid; helper                       | 5   |
| health; sick; night;<br>blue; ill | 4   |
| nice; baby                        | 3   |
| watch; illness                    | 2   |
| Id                                | 24  |

Onion

|                                                                                             |     |
|---------------------------------------------------------------------------------------------|-----|
| cry                                                                                         | 142 |
| tears                                                                                       | 42  |
| food                                                                                        | 19  |
| smell; eyes                                                                                 | 17  |
| vegetables; carrots                                                                         | 14  |
| eat                                                                                         | 12  |
| water; pickles; garlic;<br>cheese                                                           | 9   |
| tomato; peel; pickled;<br>cooking                                                           | 6   |
| chip; smelly; soup;<br>hot; stew                                                            | 5   |
| strong; spring; flavour;<br>seasoning; green;<br>plant                                      | 4   |
| potato; stink; beef-<br>burger; pepper                                                      | 3   |
| sting; roots; round;<br>apple; beetroot; chilli;<br>bitter; garden;<br>marrow; bean; French | 2   |
| Id                                                                                          | 7   |

Pain

|             |     |
|-------------|-----|
| hurt        | 113 |
| agony       | 57  |
| ache        | 40  |
| headache    | 10  |
| suffer      | 9   |
| suffering   | 8   |
| relief; ill | 6   |

Pain continued

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| pleasure; anger; cut                                                  | 5  |
| fever; injury; glass;<br>tablet; nerves;<br>aspirin; relax;<br>window | 2  |
| Id                                                                    | 57 |

Peace

|                                                          |     |
|----------------------------------------------------------|-----|
| war                                                      | 186 |
| quiet                                                    | 66  |
| love; noise                                              | 15  |
| happy; friends                                           | 9   |
| tranquillity; maker                                      | 7   |
| now; nice; God; treaty;<br>faith                         | 3   |
| man; freedom; land;<br>broken; step; kind;<br>mean; hate | 2   |
| Id                                                       | 21  |

Peach

|                      |     |
|----------------------|-----|
| fruit                | 114 |
| pear                 | 35  |
| stone                | 23  |
| juice                | 17  |
| eat                  | 16  |
| plum; tree           | 15  |
| apple; cream; orange | 14  |
| soft; sweet          | 12  |

Peach continued

|                          |    |
|--------------------------|----|
| nice; juicy; apricot     | 9  |
| food; melon              | 8  |
| pips; lemon; melba       | 5  |
| banana; round; velvet    | 4  |
| blossom; jam; teach      | 3  |
| pretty; ripe; grow; shop | 2  |
| Id                       | 15 |

People

|                                                          |    |
|----------------------------------------------------------|----|
| crowds                                                   | 80 |
| community                                                | 50 |
| friends                                                  | 29 |
| humans                                                   | 22 |
| society                                                  | 19 |
| persons                                                  | 13 |
| animal                                                   | 12 |
| population; friendly;<br>men                             | 11 |
| together; nation                                         | 10 |
| politics; party                                          | 9  |
| many                                                     | 8  |
| lots                                                     | 6  |
| noise; walk; life;<br>group; everyone;<br>pupils; social | 5  |
| gathering; children;<br>others; live; places;<br>work    | 4  |

People continued

|                                                      |    |
|------------------------------------------------------|----|
| happy; talk; town;<br>school; citizens;<br>parent    | 3  |
| mass; market; hundreds                               | 2  |
| Id                                                   | 22 |
| <u>Pig</u>                                           |    |
| sty                                                  | 46 |
| bacon                                                | 41 |
| pork                                                 | 32 |
| cow                                                  | 30 |
| farm                                                 | 28 |
| smell                                                | 25 |
| fat                                                  | 24 |
| animal; eat                                          | 16 |
| meat; food                                           | 15 |
| goat; dirty; police                                  | 11 |
| smelly; iron; ham;<br>delicious                      | 8  |
| stink; greedy; mud                                   | 5  |
| teacher; hog; horse;<br>piglet; dog; hot;<br>chicken | 4  |
| short; sister; smile;<br>sheep; copper               | 2  |
| Id                                                   | 18 |

| <u>To play</u>                                                               |     | <u>Policeman continued</u>                                          |    |
|------------------------------------------------------------------------------|-----|---------------------------------------------------------------------|----|
| games                                                                        | 100 | fireman; violence                                                   | 10 |
| football                                                                     | 40  | helmet; jail; help;<br>trouble                                      | 9  |
| enjoy                                                                        | 26  | justice                                                             | 7  |
| fun                                                                          | 21  | fuzz; job; dog; riots;<br>criminals                                 | 6  |
| child; happy                                                                 | 13  | force; steal                                                        | 5  |
| run; work                                                                    | 11  | order; bad; security;<br>arrest; court; robbery;<br>thief           | 4  |
| cards; ball                                                                  | 10  | traffic; police; burglar;<br>hate; van; robbers;<br>duty; good      | 3  |
| park                                                                         | 9   | run; car; strict; army;<br>uniform; officer;<br>football; constable | 2  |
| with; around; active                                                         | 7   | Id                                                                  | 18 |
| piano; about; act;<br>funny; swing                                           | 5   | <u>Polite</u>                                                       |    |
| laugh; amuse; youth;<br>rest; ship; go with;<br>netball                      | 4   | manners                                                             | 80 |
| match; outside;<br>recreation; relax;<br>move; hard; enjoy-<br>ment; cricket | 3   | rude                                                                | 50 |
| day; song; love; jump;<br>field; rugby; gamble                               | 2   | nice                                                                | 44 |
| Id                                                                           | 9   | kind                                                                | 35 |
| <u>Policeman</u>                                                             |     | impolite; good                                                      | 19 |
| law                                                                          | 58  | (well)-mannered                                                     | 16 |
| policewoman                                                                  | 47  | pleasant; ignorant                                                  | 7  |
| copper                                                                       | 36  | considerate; vulgar                                                 | 6  |
| pig                                                                          | 23  | disgust; sincere; obey;<br>courteous                                | 5  |
| blue                                                                         | 12  | right; behaviour;<br>respect; unkind; dig-<br>nity; ungrateful      | 4  |
| station; crime                                                               | 11  |                                                                     |    |



Polite continued

smart; pleasure;  
 person; nasty;  
 honest; politeness;  
 neat; generous;  
 thankful; friendly;  
 angry

3

Id

19

Potato

chips

86

vegetable

47

food

43

mash

39

carrots

25

peel

19

crisp

15

tomato; plant; meat

9

soud; earth

8

eat; crop; starch;  
 ground

4

peas; energy; skin;  
 fruit

2

Id

32

To pray

God

137

church

54

worship

23

Jesus; preach

16

Bible

15

To pray continued

faith

13

religious; prayer

11

priest; religion

9

hope; kneeling; ask

7

forgive; hands; kneel

6

love; heaven; thank;  
 beg; understand; Amen

4

ceremony; thankful;  
 praise

3

wish; believe; justice;  
 knee

2

Id

10

Problem

solve

75

worry

30

help

23

trouble

20

difficulty

14

unhappy

12

solution

11

depression; question;  
 solved

10

hard; difficult; think

9

anxiety; work

8

worried

7

answer; conclusion

6

sad; cry;  
 personal; people;  
 stuck; ask; idea

5

Problem continued

discuss; marriage; face;  
need 4

hate; disagree; mind;  
health; school; mistake;  
money; proof; advice;  
depressed; cause 3

parents; shame; big;  
fear; happy 2

Id 16

To punish

cane 60

hit 55

hurt 50

prison 13

whip 12

cruel; naughty; bad;  
jail 10

law 9

beat; hate 7

execute; pain; punish-  
ment; disobey; crime;  
tell off; teacher 5

cry; annoy; prosecute;  
strict; headmaster;  
mean 4

react; victimise; let  
off; hard; detention;  
stick; suffer; wrong;  
murder; behaviour 3

reason; expel; severe;  
fall; beating 2

Id 12

Pyjamas

bed 138

sleep 55

nightdress 41

nightie 37

wear 24

nightclothes 11

bedtime 9

nightgown 8

night; warm 6

take off; cotton 5

strip; boys 4

sleep-clothes; hospital;  
top; blanket; night-  
wear; pillow 3

thick; shirt; garment;  
toe; sex; hot;  
trousers; pink 2

Id 6

Question

answer 310

ask 12

work 6

mark 5

paper 4

quiz 4

why; difficult; exam;  
time; test; school 3

| <u>Question continued</u>                                                     |    | <u>Radio</u>                                                          |     |
|-------------------------------------------------------------------------------|----|-----------------------------------------------------------------------|-----|
| paint; teacher; ear;<br>asker; questionable;<br>hard; shot; think;<br>enquire | 2  | music                                                                 | 103 |
| Id                                                                            | 11 | listen                                                                | 51  |
|                                                                               |    | TV                                                                    | 48  |
|                                                                               |    | station                                                               | 24  |
| <u>Rabbit</u>                                                                 |    | One                                                                   | 21  |
|                                                                               |    | Capital                                                               | 16  |
| hare                                                                          | 60 | songs                                                                 | 13  |
| hutch                                                                         | 57 | noisy; transistor;<br>noise                                           | 10  |
| carrot                                                                        | 32 | records; programme                                                    | 8   |
| animal                                                                        | 24 | sound; cassette                                                       | 6   |
| pet                                                                           | 17 | broadcast; ariel; set;<br>amusement                                   | 4   |
| ears                                                                          | 15 | record-player; pops;<br>wave; wireless;<br>entertainment;<br>recorder | 3   |
| stew                                                                          | 12 |                                                                       |     |
| burrow                                                                        | 10 | time; police; slow;<br>band                                           | 2   |
| cage; mouse; wild                                                             | 8  | Id                                                                    | 20  |
| teeth; pie                                                                    | 7  |                                                                       |     |
| bunny; fur; jump; hole                                                        | 6  |                                                                       |     |
| warren; meat; furry;<br>field                                                 | 5  | <u>Rain</u>                                                           |     |
| white; cabbage; male;<br>eat                                                  | 4  | wet                                                                   | 100 |
| hop; hobbit; race;<br>kill; dog                                               | 3  | sun                                                                   | 64  |
| fox; mare                                                                     | 2  | water                                                                 | 57  |
| Id                                                                            | 21 | snow                                                                  | 51  |
|                                                                               |    | umbrella                                                              | 20  |
|                                                                               |    | drops; coat                                                           | 9   |

Rain continued

|                                         |   |
|-----------------------------------------|---|
| sunshine                                | 8 |
| pour; weather                           | 7 |
| sleet; shower; fall;<br>thunder         | 6 |
| cloud; winter; England;<br>cold         | 5 |
| storm; puddle; stream;<br>lightning     | 4 |
| splash; hat; clear;<br>sunny; swim; dry | 2 |
| Id                                      | 8 |

To read

|                                                                                        |     |
|----------------------------------------------------------------------------------------|-----|
| book                                                                                   | 177 |
| write                                                                                  | 49  |
| learn                                                                                  | 20  |
| words                                                                                  | 12  |
| newspaper                                                                              | 11  |
| aloud; knowledge                                                                       | 8   |
| look; enjoy                                                                            | 6   |
| study; read; listen;<br>see                                                            | 5   |
| educate; paper;<br>vocabulary; watch;<br>illustrate; boring;<br>take in; about         | 4   |
| English; interest;<br>print; hard; story;<br>thought; understand;<br>school; head; eye | 3   |
| Id                                                                                     | 8   |

Red

|                |    |
|----------------|----|
| blue           | 92 |
| blood          | 43 |
| white          | 35 |
| black; danger  | 28 |
| yellow         | 20 |
| colour         | 18 |
| green          | 16 |
| pink; bus      | 10 |
| orange; bright | 9  |
| roses; light   | 6  |
| sea; sun       | 5  |

|                                                 |   |
|-------------------------------------------------|---|
| face; brick; meat; fire;<br>hot; pencil; Indian | 3 |
|-------------------------------------------------|---|

|                                                             |   |
|-------------------------------------------------------------|---|
| lead; bull; hair;<br>litter; bed; car;<br>book; coat; check | 2 |
|-------------------------------------------------------------|---|

|    |    |
|----|----|
| Id | 19 |
|----|----|

To remember

|                       |     |
|-----------------------|-----|
| forget                | 170 |
| think                 | 37  |
| memory                | 35  |
| recall                | 26  |
| mind                  | 13  |
| remind                | 11  |
| thought               | 10  |
| know; souvenir; bring | 6   |

To remember continued

you; brainy; look back;  
old days 4

unforgettable; grave;  
things; always;  
remote; recognize;  
learn; good day 3

everyone; schooldays;  
remembered; keep;  
grasp 2

Id 16

To rent

house 89

falt 34

let; pay 33

buy 26

money 22

borrow 18

hire 16

lend; tenant 10

council; own 9

car; TV; accommodation 5

sell; bill; earn; loan;  
rate; tent; to book;  
room 4

sale; lodge; live; pur-  
chase; land; rented;  
apartment; caravan;  
occupy 2

Id 5

To respect

to like 59

honour 39

admire 37

disrespect 26

love 23

polite 17

manners 13

behave 18

hate 11

think (of); obey 9

care; people; olders 6

teacher; kind; work;  
mother; adore; proud 4

father; trust; good;  
help; treat; friend 4

Id 54

To ride

horse 146

motorbike 33

walk 26

travel 24

car 10

bicycle 9

bus 8

move 7

gallop; fall 6

enjoyment 5

School

|                                                                                                          |     |
|----------------------------------------------------------------------------------------------------------|-----|
| work                                                                                                     | 103 |
| teacher                                                                                                  | 38  |
| learn                                                                                                    | 30  |
| lesson                                                                                                   | 17  |
| pupils; children                                                                                         | 15  |
| books; education                                                                                         | 14  |
| rubbish                                                                                                  | 10  |
| hate; university; bore                                                                                   | 8   |
| uniform; teach                                                                                           | 7   |
| homework; prison; bad                                                                                    | 6   |
| room; class; boring                                                                                      | 5   |
| college; friends; rules;<br>bus; comprehensive                                                           | 4   |
| exam; big; stupid;<br>dump; seen; a dog's<br>life; grammar; hard;<br>playground; mental;<br>horrid; desk | 3   |
| time; closed; horrible;<br>primary; lovely; good;<br>home; nice; day;<br>building; holiday               | 2   |
| Id                                                                                                       |     |

Science

|                       |    |
|-----------------------|----|
| fiction               | 60 |
| chemistry; experiment | 40 |
| biology               | 39 |
| physics               | 37 |
| laboratory            | 16 |

Science continued

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| history; boring                                                                      | 11 |
| lesson; invent                                                                       | 9  |
| space; social;<br>technology                                                         | 7  |
| invention; scientist;<br>discovery; testtubes;<br>club                               | 5  |
| professor; nuclear;<br>future; apparatus                                             | 4  |
| moon; general; advance;<br>rubbish; material;<br>plant; facts; maths;<br>school; man | 3  |
| book; work; body; brain;<br>today; difficult;<br>thermometer                         | 2  |
| Id                                                                                   | 16 |

To see off

|                                                                |     |
|----------------------------------------------------------------|-----|
| goodbye                                                        | 140 |
| go                                                             | 49  |
| wave                                                           | 27  |
| chase                                                          | 22  |
| leave                                                          | 11  |
| train; send                                                    | 7   |
| handshake; change; show                                        | 5   |
| station; departure;<br>farewell                                | 5   |
| welcome; go away; let go;<br>pack; ride; greet;<br>invite; dog | 4   |
| depart; bite; bang; stay                                       | 3   |
| Id                                                             | 37  |

Sailor

|                                                                |     |
|----------------------------------------------------------------|-----|
| ship                                                           | 120 |
| sea                                                            | 81  |
| boat                                                           | 37  |
| navy                                                           | 19  |
| soldier                                                        | 12  |
| army                                                           | 10  |
| uniform; water; hallo                                          | 8   |
| boy; sail; captain                                             | 7   |
| seaman                                                         | 6   |
| blue; suit; booth                                              | 4   |
| shipmate; yaucht; crew;<br>waiter; deck; service;<br>policeman | 3   |
| nice; mate; man; away                                          | 2   |
| Id                                                             | 3   |

Saleswoman

|                                                           |     |
|-----------------------------------------------------------|-----|
| salesman                                                  | 129 |
| assistant                                                 | 41  |
| shop                                                      | 34  |
| sell                                                      | 27  |
| seller; buy                                               | 9   |
| perfume                                                   | 8   |
| article; represen-<br>tative                              | 6   |
| sale; store; persistent;<br>manageress                    | 4   |
| dress; case; polite;<br>job; lady; helpful;<br>prostitute | 3   |

Saleswoman continued

|                                                                                                              |     |
|--------------------------------------------------------------------------------------------------------------|-----|
| sexy; young; nice;<br>no good; wear; fun;<br>ugly; smile; cow;<br>lovely; kind; uncon-<br>vincing            | 2   |
| Id                                                                                                           | 14  |
| <u>Scale</u>                                                                                                 |     |
| weight                                                                                                       | 111 |
| fish                                                                                                         | 67  |
| weigh                                                                                                        | 50  |
| measure                                                                                                      | 18  |
| size                                                                                                         | 13  |
| music                                                                                                        | 11  |
| maps                                                                                                         | 10  |
| model                                                                                                        | 9   |
| ounce                                                                                                        | 7   |
| pound; measurement;<br>stairs; like                                                                          | 6   |
| climb; grade                                                                                                 | 5   |
| electric; piano; work;<br>thermometer; justice;<br>area                                                      | 4   |
| inch; shop; cut down;<br>low; up; small; whale;<br>market; amount                                            | 3   |
| sing; mountain; graph;<br>mile; tons; skin; cake;<br>major; ruler; well;<br>goods; wash; division;<br>octave | 2   |
| Id                                                                                                           | 5   |

To ride continued

|                                                |    |
|------------------------------------------------|----|
| saddle; transport                              | 4  |
| sit; mount; journey;<br>jump; drive; fast; run | 2  |
| Id                                             | 41 |

River

|                                                            |     |
|------------------------------------------------------------|-----|
| water                                                      | 134 |
| stream                                                     | 72  |
| sea                                                        | 38  |
| lake                                                       | 37  |
| Thames                                                     | 14  |
| fish                                                       | 7   |
| flowing                                                    | 6   |
| swim                                                       | 5   |
| bed; wet; canal                                            | 4   |
| pond                                                       | 3   |
| valley; boat; bridge;<br>Nile; Rhine; drown;<br>deep; bank | 2   |
| Id                                                         | 28  |

Room

|             |    |
|-------------|----|
| house       | 55 |
| door        | 47 |
| bed         | 43 |
| walls       | 29 |
| flat; space | 14 |

Room continued

|                                                    |    |
|----------------------------------------------------|----|
| place; furniture                                   | 10 |
| dining; living                                     | 9  |
| big; warm; empty; shoes;<br>kitchen; accommodation | 6  |
| service; private; let                              | 5  |
| lounge; tables; shut;<br>window; square            | 4  |
| class; rest; sitting                               | 3  |
| carpet; TV; small;<br>alone; box                   | 2  |
| Id                                                 | 31 |

Round

|                                                                                                                       |     |
|-----------------------------------------------------------------------------------------------------------------------|-----|
| square                                                                                                                | 140 |
| circle                                                                                                                | 89  |
| ball; table                                                                                                           | 18  |
| about                                                                                                                 | 16  |
| circular; flat                                                                                                        | 8   |
| oval; house                                                                                                           | 7   |
| long; corner; shape                                                                                                   | 5   |
| smooth; record; paper;<br>body; fat                                                                                   | 3   |
| ring; magic; head;<br>straight; short; orange;<br>balloon; even; long;<br>end; bald; object; sun;<br>wheel; hexagonal | 2   |
| Id                                                                                                                    | 10  |



To sell

|                        |     |
|------------------------|-----|
| buy                    | 228 |
| money                  | 31  |
| purchase               | 20  |
| shop                   | 14  |
| give                   | 12  |
| sale                   | 11  |
| market; trade          | 6   |
| profit; goods; auction | 5   |
| Id                     | 35  |

Servant

|                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------|----|
| slave                                                                                                              | 88 |
| waiter                                                                                                             | 40 |
| maid                                                                                                               | 32 |
| butler                                                                                                             | 25 |
| serve                                                                                                              | 16 |
| master                                                                                                             | 15 |
| help; work; helper                                                                                                 | 10 |
| service; rich                                                                                                      | 8  |
| house; hotel; lazy                                                                                                 | 6  |
| restaurant; worker;<br>bring                                                                                       | 5  |
| assistant; civil; mug;<br>cleaner; Victorian<br>time                                                               | 4  |
| man; wealth; hire;<br>money; attendant;<br>energetic; employed;<br>aid; king; tray;<br>Romans; good; food;<br>wipe | 2  |
| Id                                                                                                                 | 17 |

Ship

|                                                       |    |
|-------------------------------------------------------|----|
| sea                                                   | 98 |
| sail                                                  | 79 |
| boat                                                  | 70 |
| water                                                 | 27 |
| sink                                                  | 13 |
| sailor                                                | 10 |
| seasick; wreck; float;<br>mast; ocean                 | 6  |
| shop; travel; sailing                                 | 4  |
| smuggling; house;<br>waves; yacht; anchor;<br>captain | 3  |
| car; plane; fuel;<br>chimney; yard; visit             | 2  |
| Id                                                    | 8  |

Shirt

|                                       |    |
|---------------------------------------|----|
| tie                                   | 99 |
| clothes                               | 46 |
| blouse                                | 34 |
| skirt; trousers                       | 30 |
| jumper                                | 26 |
| button                                | 24 |
| collar; wear; vest                    | 14 |
| clothing; sleeves                     | 8  |
| cotton                                | 6  |
| jacket                                | 5  |
| dress; colourful                      | 4  |
| shoes; clean; chinese;<br>school; boy | 2  |
| Id                                    | 22 |

Short

|                                                          |     |
|----------------------------------------------------------|-----|
| tall                                                     | 129 |
| long                                                     | 127 |
| fat                                                      | 30  |
| small                                                    | 14  |
| trousers                                                 | 8   |
| shorts                                                   | 6   |
| hair; man; time                                          | 5   |
| little; bread; tail;<br>cut                              | 4   |
| vest; wide; distance;<br>story                           | 3   |
| essay; sighted; stumpy;<br>hard; sleeves; tough;<br>stem | 2   |
| Id                                                       | 15  |

To shut

|                                            |     |
|--------------------------------------------|-----|
| close                                      | 169 |
| open                                       | 111 |
| door                                       | 40  |
| to lock                                    | 11  |
| slam                                       | 9   |
| window                                     | 7   |
| bang                                       | 4   |
| room; keep out; unlock                     | 3   |
| light; speak; trapped;<br>curtain; cut off | 2   |
| Id                                         | 10  |

Sick

|                                       |     |
|---------------------------------------|-----|
| ill                                   | 183 |
| vomit                                 | 25  |
| well                                  | 24  |
| health; healthy                       | 12  |
| poorly; horrible; bad;<br>smell       | 7   |
| upset; good; unwell                   | 6   |
| home; poor; bad;<br>alcoholic         | 5   |
| illness; doctor; tired;<br>drink      | 4   |
| death; spew; food;<br>feeble          | 3   |
| helpless; old; cry;<br>pig; hurt; mad | 2   |
| Id                                    | 15  |

Sincere

|                                                             |    |
|-------------------------------------------------------------|----|
| honest                                                      | 52 |
| true                                                        | 21 |
| letter                                                      | 16 |
| good                                                        | 15 |
| nice; faithful                                              | 13 |
| (best) wishes; love;<br>thank; friends;<br>insincere; truth | 11 |
| sincerely; trust; yours                                     | 10 |
| thankful; greeting;<br>grateful                             | 8  |
| worthy; truthly;<br>faithfully                              | 6  |

Sincere continued

kind; friendly; manners 5  
 thank you; loving;  
   truthful; sorry;  
   helpful; honesty;  
   hypocritical 4  
 always; service; welcome;  
   affectionate; real;  
   mean; lie 3  
 old; belief; meaning;  
   glad 2

Id

Sister

brother 309  
 girl 12  
 love 8  
 friend 7  
 relationships 6  
 nurse 5  
 horrible; father 4  
 silly; female 3  
 ugly; mother; car;  
   kind; help; jealous;  
   family; pest; enemy;  
   rotten; hate; attrac-  
   tive; mum; relation;  
   evil; cow; nun;  
   daughter; in-law;  
   trouble 2  
 Id 6

Skirt

dress 67  
 trousers 47  
 blouse 46  
 shirt 22  
 jumper 21  
 girl; wear 16  
 clothes; legs 14  
 long; short; top 8  
 shoes; tight; pattern;  
   take off; coat; flared;  
   pleat; summer; strips;  
   material; garment;  
   socks; zip; cold 4  
 tie; belt; hood 3  
 necklace; funny; blow  
   up; skip; pretty;  
   piece 2  
 Id 9  
Sky  
 blue 192  
 cloud 61  
 earth 14  
 stars 13  
 birds 12  
 plane 11  
 night; high; ground 10  
 land; rain 9

Sky continued

|                      |   |
|----------------------|---|
| fly; space           | 8 |
| air; sea             | 7 |
| empty; floor         | 5 |
| sun; weather; heaven | 4 |
| moon; snow           | 3 |
| dark; day; light     | 2 |
| Id                   | 2 |

To sleep

|                                                           |    |
|-----------------------------------------------------------|----|
| dream                                                     | 73 |
| bed                                                       | 66 |
| wake                                                      | 43 |
| rest; awake                                               | 33 |
| tired                                                     | 29 |
| relax                                                     | 14 |
| snore                                                     | 11 |
| night                                                     | 10 |
| in bed                                                    | 8  |
| eyes; deep                                                | 7  |
| awaken                                                    | 6  |
| soundly; well                                             | 5  |
| slumber                                                   | 4  |
| dead; lie; silent; peace                                  | 3  |
| shut eyes; pillow; lazy;<br>dark; moving; fall;<br>lovely | 2  |
| Id                                                        | 7  |

To smoke

|                                                                  |     |
|------------------------------------------------------------------|-----|
| cigarette                                                        | 102 |
| cancer                                                           | 35  |
| fag- cough                                                       | 17  |
| smell                                                            | 11  |
| inhale; death                                                    | 9   |
| health; bad; smoke                                               | 7   |
| tar; danger; fire;<br>fumes; die                                 | 6   |
| pipe; lighter; puff;<br>unhealthy; horrible;<br>drag; dad; habit | 5   |
| kill; ask; silly; lungs;<br>cigar; burn                          | 4   |
| enjoyment; stupid;<br>suffer; heatwave; money                    | 3   |
| Id                                                               | 11  |

Society

|                                           |    |
|-------------------------------------------|----|
| people                                    | 30 |
| group                                     | 24 |
| community; friends                        | 15 |
| association; organi-<br>zation            | 14 |
| building; environment                     | 12 |
| government; police; life;<br>club; social | 8  |
| public; gathering; bad                    | 7  |
| large; union; bank;<br>violence; welfare  | 6  |

Society continued

boring; hate; company;  
service; place; upper  
class 5

neighbour; class;  
dangerous; Halifax;  
family; mess; help;  
doctor; party;  
relatives; politics;  
rubbish; helpful 4

high; member; guard;  
school; private; big;  
trouble 3

problems; age; secure;  
world; trust; Russia;  
kind; together;  
Woolwich; living; safe;  
security; joint; every-  
body; religion 2

Id 20

Son

daughter 229

father 49

boy 39

brother 10

sister 5

love 4

children 3

offspring 2

family 2

Id 20

Space

moon 65

ship 56

stars 31

planet; rocket 22

room 16

air 13

man; time 12

empty; universe; open 11

dark 10

astronomy; 1999 7

area; sky; void 6

craft; earth 5

astronaut; night 4

vacuum; gap; black;  
outer; explore; age;  
atmosphere 3

countryside; hopper;  
Apollo; USA; spy 2

Id 23

Spring

summer 95

autumn 42

flowers 35

lamb 16

winter 14

jump; bounce 11

season; green 9

Spring continued

|                                           |    |
|-------------------------------------------|----|
| water; onion                              | 8  |
| field; bed                                | 7  |
| time; stream                              | 6  |
| daffodil; sing                            | 5  |
| worm; chair; soil; sun                    | 4  |
| frogs; leaves; term;<br>sunny; trees; fly | 3  |
| holiday; day                              | 2  |
| Id                                        | 15 |

Station

|                                          |     |
|------------------------------------------|-----|
| train                                    | 242 |
| railway                                  | 36  |
| police                                   | 20  |
| bus                                      | 10  |
| master                                   | 8   |
| platform; Victoria                       | 6   |
| wagon; stop                              | 5   |
| suitcases; road                          | 4   |
| Waterloo; track;<br>Paddington; approach | 2   |
| Id                                       | 16  |

Story

|      |     |
|------|-----|
| book | 145 |
| tale | 49  |
| tell | 23  |

Story continued

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| read                                                              | 20  |
| teller                                                            | 18  |
| poem; fiction                                                     | 13  |
| bedtime                                                           | 11  |
| fable                                                             | 10  |
| love                                                              | 9   |
| fairy                                                             | 6   |
| novel                                                             | 5   |
| words; long; compo-<br>sition; romance                            | 4   |
| character; Sinbad; lie;<br>chapter; house; write;<br>essay; rhyme | 3   |
| picture; time; yarn                                               | 2   |
| Id                                                                | 28  |
| <u>Street</u>                                                     |     |
| road                                                              | 120 |
| houses                                                            | 50  |
| lights                                                            | 16  |
| life                                                              | 15  |
| shops                                                             | 14  |
| people; coronation;<br>lamps                                      | 13  |
| cars                                                              | 12  |
| noisy; avenue                                                     | 11  |
| walk; long                                                        | 10  |
| lane; town                                                        | 9   |

Street continued

|                                                    |    |
|----------------------------------------------------|----|
| park; pavement                                     | 7  |
| village; high; busy;<br>place                      | 6  |
| noise; fight; city                                 | 5  |
| dangerous; dirty;<br>crowded; live; corner         | 4  |
| traffic; lamplights;<br>walkers; dangers;<br>party | 3  |
| Id                                                 | 11 |

Strong

|                        |     |
|------------------------|-----|
| weak                   | 251 |
| muscles                | 39  |
| man                    | 16  |
| muscular; tough; smell | 11  |
| big; arm               | 6   |
| healthy; strength      | 4   |
| hard; Samson           | 2   |
| Id                     | 20  |

To succeed

|                     |    |
|---------------------|----|
| win                 | 51 |
| fail                | 39 |
| success             | 32 |
| well done           | 25 |
| achieve; successful | 14 |
| pass; happy; finish | 10 |

To succeed continued

|                                                                                      |   |
|--------------------------------------------------------------------------------------|---|
| good; make it; follow                                                                | 8 |
| clever; enjoy; accom-<br>plish; congratulate;<br>do                                  | 6 |
| gain; overcome;<br>ambitious                                                         | 5 |
| reach; complete; joy;<br>do well                                                     | 4 |
| wrong; carry on; proceed;<br>promotion; encourage;<br>to get on; congratu-<br>lation | 3 |

|                                                                                                                                              |    |
|----------------------------------------------------------------------------------------------------------------------------------------------|----|
| cake; take over; hard;<br>bravo; further; reign;<br>sad; test; confident;<br>great; try; relief;<br>work; race; set;<br>hopeless; take place | 2  |
| Id                                                                                                                                           | 14 |

Suit

|                        |     |
|------------------------|-----|
| clothes                | 120 |
| trousers               | 45  |
| jacket                 | 37  |
| smart                  | 25  |
| shirt                  | 19  |
| wear                   | 18  |
| tie; match             | 16  |
| dress                  | 15  |
| case                   | 7   |
| fashion; coat; shoes   | 6   |
| jeans; boot            | 4   |
| rags; new; tailor; fit | 2   |
| Id                     | 39  |

Sun

|                   |     |
|-------------------|-----|
| moon              | 106 |
| hot               | 67  |
| rain              | 41  |
| heat              | 37  |
| shine             | 24  |
| summer; bright    | 15  |
| warm              | 11  |
| sky; holiday      | 10  |
| warmth            | 9   |
| glasses           | 6   |
| set; rise; planet | 5   |
| shade             | 4   |
| light             | 3   |
| ray; wind; cloud  | 2   |
| Id                | 32  |

Sweet

|                      |     |
|----------------------|-----|
| sour                 | 137 |
| sugar                | 72  |
| teeth                | 24  |
| eat                  | 17  |
| chocolate            | 13  |
| sweets; honey        | 12  |
| bitter; music; taste | 9   |
| chew; toffee         | 7   |
| sticky; cake         | 6   |

Sweet continued

|                                              |    |
|----------------------------------------------|----|
| nice; apple; tasty                           | 5  |
| food; shop; tea                              | 4  |
| oranges; nasty; drink;<br>heart; kids; fruit | 3  |
| ice cream; sensation;<br>dry; paper          | 2  |
| Id                                           | 19 |

To swim

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| water                                                               | 103 |
| drown                                                               | 73  |
| dive                                                                | 44  |
| float                                                               | 20  |
| stroke; sea; sink                                                   | 12  |
| exercise; wet; move                                                 | 9   |
| race; bathe                                                         | 8   |
| save; floating; bath                                                | 5   |
| swimming-pool; dry;<br>paddle; splash; enjoy-<br>ment; walk; active | 4   |

|                                                          |   |
|----------------------------------------------------------|---|
| ride; fish; slimming;<br>tired; cool; pleasure;<br>enjoy | 3 |
|----------------------------------------------------------|---|

Id

Taxi

|        |    |
|--------|----|
| driver | 90 |
| car    | 80 |



Taxi continued

|                                    |    |
|------------------------------------|----|
| cab                                | 75 |
| ride                               | 22 |
| transport                          | 17 |
| fare                               | 15 |
| hire                               | 11 |
| money; expensive;<br>travel        | 9  |
| pay; bus; black                    | 8  |
| wait; London; drive                | 6  |
| journey; man                       | 4  |
| lift; cost; home;<br>yellow; coach | 3  |
| luxury; go; noise;<br>road         | 2  |
| Id                                 | 14 |

Tea

|                                |     |
|--------------------------------|-----|
| coffee                         | 139 |
| drink                          | 69  |
| cup                            | 20  |
| time                           | 16  |
| leaves                         | 15  |
| biscuits                       | 13  |
| bag                            | 12  |
| sugar; cake                    | 10  |
| milk                           | 9   |
| pot; party                     | 8   |
| invite; dinner; break-<br>fast | 7   |

Tea continued

|                                                                    |   |
|--------------------------------------------------------------------|---|
| Indian; toast; bun                                                 | 6 |
| hot; afternoon                                                     | 4 |
| friends; lemon; shop;<br>smoke; eat; Ceylon;<br>china; room; spoon | 3 |
| sea; relax; great;<br>evening; maker; towel;<br>delicious          | 2 |
| Id                                                                 | 5 |

Teacher

|                                      |    |
|--------------------------------------|----|
| school                               | 85 |
| pupils                               | 58 |
| learn                                | 33 |
| student; lesson                      | 11 |
| education; teach                     | 10 |
| work                                 | 8  |
| person; hate                         | 6  |
| horrible; children                   | 5  |
| book; preacher                       | 4  |
| bossy                                | 3  |
| boss; professor; help;<br>man; class | 2  |
| Id                                   | 45 |

Telephone

|               |     |
|---------------|-----|
| ring          | 113 |
| box; call     | 35  |
| communication | 21  |

Telephone continued

|                                                                                             |    |
|---------------------------------------------------------------------------------------------|----|
| talk                                                                                        | 17 |
| communicate; number                                                                         | 13 |
| dial                                                                                        | 12 |
| speak; TV                                                                                   | 11 |
| bill; line                                                                                  | 8  |
| exchange; wire                                                                              | 7  |
| answer                                                                                      | 6  |
| friend; phone; cable                                                                        | 5  |
| to talk; red; spread                                                                        | 4  |
| engaged; book; booth;<br>purr; receiver;<br>operator; conversation                          | 3  |
| speaking; contact;<br>operate; bell; money;<br>news; listen; abroad;<br>receive; connection | 2  |
| Id                                                                                          | 6  |

Television

|                        |    |
|------------------------|----|
| programme              | 80 |
| watch                  | 62 |
| radio                  | 55 |
| picture                | 20 |
| screen                 | 16 |
| entertainment          | 14 |
| box                    | 11 |
| boring                 | 10 |
| show; films; set       | 9  |
| play                   | 7  |
| licence; advertisement | 6  |

Television continued

|                                                                                                         |   |
|---------------------------------------------------------------------------------------------------------|---|
| rent; news; telephone                                                                                   | 5 |
| violence; station                                                                                       | 4 |
| switch; pops; actor;<br>horrible; cops; news-<br>caster; football;<br>camera; vision; ariel;<br>fond of | 3 |
| sound; colour; bright;<br>fuse; image; BBC;<br>look; out                                                | 2 |
| Id                                                                                                      | 6 |

Tent

|                                            |     |
|--------------------------------------------|-----|
| camping                                    | 100 |
| camp                                       | 58  |
| house                                      | 21  |
| holiday                                    | 20  |
| canvas                                     | 16  |
| scout; caravan                             | 12  |
| shelter; peg; grass                        | 9   |
| pitch; field                               | 7   |
| pole; sleep; sleeping bag                  | 5   |
| live; country; cold;<br>cover; bent; build | 2   |
| Id                                         | 46  |

To thank

|           |    |
|-----------|----|
| grateful  | 42 |
| you       | 41 |
| to please | 38 |

To thank continued

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| appreciate; give                                                                     | 17 |
| congratulate                                                                         | 14 |
| thanks; polite                                                                       | 12 |
| pleased                                                                              | 11 |
| God; shake hand                                                                      | 10 |
| praise                                                                               | 9  |
| thankful; tar; help;<br>kind                                                         | 8  |
| gift; gratitude                                                                      | 7  |
| good; happy; take;<br>receive                                                        | 6  |
| forgive; oblige; nice;<br>think; praising;<br>appreciation                           | 5  |
| kiss; grace; blessing;<br>smile; presents;<br>manners; greet                         | 4  |
| accept; ignore; people;<br>enjoy; like; friend;<br>regret; love;<br>thanking; cheers | 3  |
| pleasure; joy; someone;<br>thankfulness; welcome                                     | 2  |
| Id                                                                                   | 15 |

Time

|                  |     |
|------------------|-----|
| clock            | 132 |
| watch            | 46  |
| minute           | 23  |
| hour             | 21  |
| seconds          | 16  |
| slow; fast; bell | 9   |

Time continued

|                                                                   |   |
|-------------------------------------------------------------------|---|
| fly; machine                                                      | 8 |
| waste; late                                                       | 7 |
| timer; table                                                      | 6 |
| day; run                                                          | 5 |
| quarters; year; pass;<br>travel; rush; short;<br>space            | 4 |
| end: last; important                                              | 3 |
| little; long; finished;<br>age; non-stop; area;<br>bed; up; hurry | 2 |

Id

Tomato

|                                                       |    |
|-------------------------------------------------------|----|
| red                                                   | 86 |
| juice                                                 | 50 |
| fruit                                                 | 45 |
| sauce                                                 | 32 |
| squash                                                | 29 |
| vegetable                                             | 28 |
| plant                                                 | 25 |
| soup                                                  | 17 |
| salad                                                 | 16 |
| ketchup                                               | 10 |
| potato; food                                          | 9  |
| pip; carrot                                           | 7  |
| cucumber; eat; onion                                  | 5  |
| seed; ripe                                            | 4  |
| greenhouse; pepper;<br>garden; grow; cabbage;<br>soft | 3  |

Tomato continued

|                              |   |
|------------------------------|---|
| field; fruit; salad;<br>pear | 2 |
| Id                           | 7 |

Tongue

|                                                                                     |     |
|-------------------------------------------------------------------------------------|-----|
| mouth                                                                               | 126 |
| talk                                                                                | 57  |
| speak                                                                               | 27  |
| teeth                                                                               | 24  |
| lick                                                                                | 15  |
| taste                                                                               | 13  |
| kiss                                                                                | 11  |
| lips                                                                                | 9   |
| mother                                                                              | 8   |
| ox                                                                                  | 7   |
| long; eat                                                                           | 6   |
| body; read; food;<br>face; nose                                                     | 5   |
| tied; laugh; flavour;<br>wet; waggle; throat;<br>lungs                              | 3   |
| head; night; mother-in-<br>law; move; ham; words;<br>language; rough; spit;<br>bite | 2   |
| Id                                                                                  | 14  |

Tourist

|           |    |
|-----------|----|
| holiday   | 70 |
| foreigner | 62 |

Tourist continued

|                                                      |    |
|------------------------------------------------------|----|
| visitor                                              | 38 |
| travel                                               | 30 |
| attraction                                           | 21 |
| visit                                                | 13 |
| London                                               | 11 |
| traveller; American;<br>people                       | 8  |
| money                                                | 7  |
| camera; guide; country                               | 6  |
| sight; holidaymaker;<br>tour; sightseeing;<br>person | 4  |
| world; look; sunglasses                              | 2  |
| Id                                                   | 34 |

Trade

|                               |    |
|-------------------------------|----|
| work                          | 38 |
| sell                          | 37 |
| union                         | 29 |
| market                        | 25 |
| business                      | 22 |
| goods                         | 19 |
| money                         | 18 |
| job                           | 17 |
| buy                           | 14 |
| commerce; barter;<br>industry | 11 |
| man; sale; skill              | 10 |
| congress                      | 9  |

Trade continued

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| mark; exchange;<br>computer; bargain                                        | 8  |
| profit; fair; society                                                       | 7  |
| engagement; profession;<br>swap                                             | 5  |
| craftsman; customs;<br>organization; book;<br>customer; difficult;<br>price | 4  |
| company; carpenter;<br>worker; bad; give;<br>cars                           | 3  |
| clothes; post; shop;<br>stop; printer;<br>engineer                          | 2  |
| Id                                                                          | 17 |

Train

|                                  |    |
|----------------------------------|----|
| station                          | 58 |
| fast                             | 37 |
| railway                          | 28 |
| travel                           | 29 |
| carriage                         | 24 |
| transport                        | 20 |
| bus                              | 18 |
| car; journey                     | 16 |
| engine; ride; track              | 12 |
| steam; rails; move               | 8  |
| tunnel; noise; smoke             | 7  |
| coach; goods                     | 5  |
| whistle; robbery;<br>electricity | 4  |
| boat; quick; rattle;<br>fare     | 3  |

Train continued

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| rob; line; visit;<br>wheels                                                            | 2  |
| Id                                                                                     | 29 |
| <u>To travel</u>                                                                       |    |
| holiday                                                                                | 60 |
| go (away)                                                                              | 31 |
| plane; car                                                                             | 24 |
| journey                                                                                | 21 |
| train; move around                                                                     | 19 |
| visit; tour                                                                            | 17 |
| fly                                                                                    | 14 |
| see; abroad; coach                                                                     | 10 |
| far; distance                                                                          | 8  |
| transport; tourist;<br>explore                                                         | 6  |
| countries; leave;<br>boat; world                                                       | 5  |
| suitcase; drive; bus;<br>Spain; places;<br>sickness                                    | 4  |
| get around; widely;<br>airport; excursion;<br>across; wide; rail;<br>journalists; walk | 3  |
| stop; alone; money;<br>France; exciting;<br>comfortable; meet;<br>America; flight; fun | 2  |
| Id                                                                                     | 5  |

Trousers

|                                        |    |
|----------------------------------------|----|
| shirt                                  | 54 |
| leg                                    | 38 |
| clothes                                | 32 |
| skirt                                  | 27 |
| wear; pants                            | 24 |
| jacket                                 | 20 |
| belt                                   | 16 |
| shoes                                  | 15 |
| suit; zip                              | 12 |
| socks; jeans; jumper                   | 10 |
| shorts; clothing                       | 6  |
| dress                                  | 5  |
| coat; tight; tie; shop                 | 4  |
| down; male; smart;<br>braces; take off | 3  |
| seat; unfasten; warm                   | 2  |
| Id                                     | 27 |

Turnip

|           |    |
|-----------|----|
| vegetable | 98 |
| parsnip   | 36 |
| carrot    | 25 |
| food      | 22 |
| eat       | 20 |
| grow      | 15 |

Turnip continued

|                                                                |    |
|----------------------------------------------------------------|----|
| radish; onion; plant;<br>ground                                | 12 |
| weed                                                           | 11 |
| horrible                                                       | 9  |
| stew; cabbage; pickle;<br>garden                               | 8  |
| farmer; spud; root                                             | 7  |
| farm; potato; swede;<br>lettuce; cow; flowers                  | 5  |
| soul; sick; bad;<br>parsley                                    | 4  |
| field; nasty; mushroom;<br>mud; saucepan; stem;<br>chip; white | 2  |
| Id                                                             |    |

Umbrella

|                                                                |     |
|----------------------------------------------------------------|-----|
| rain                                                           | 293 |
| dry                                                            | 15  |
| wet; up                                                        | 6   |
| shelter; handle                                                | 5   |
| protection; coat                                               | 4   |
| under; water; black                                            | 3   |
| unlucky; open; hat; rash;<br>cover; wetness; stand;<br>weather | 2   |
| Id                                                             | 4   |

| <u>Uncle</u>                                                                                |     | <u>University</u>                                    |     |
|---------------------------------------------------------------------------------------------|-----|------------------------------------------------------|-----|
| aunt                                                                                        | 292 | college                                              | 154 |
| family; cousin                                                                              | 5   | school                                               | 48  |
| relation; man; friend                                                                       | 4   | challenge                                            | 26  |
| relative; nephew; son;<br>agent                                                             | 3   | education                                            | 17  |
| niece; Bill; communion;<br>old                                                              | 2   | brains                                               | 15  |
| Id                                                                                          | 20  | learn; clever                                        | 14  |
|                                                                                             |     | intelligent                                          | 10  |
|                                                                                             |     | Oxford; Cambridge; snobs                             | 8   |
| <u>Unity</u>                                                                                |     | graduate                                             | 7   |
| together                                                                                    | 100 | students                                             | 6   |
| unite                                                                                       | 40  | degree; lecture;<br>educational; study;<br>professor | 4   |
| united                                                                                      | 35  | teach; work; educate;<br>boring                      | 3   |
| union                                                                                       | 25  | learning; scholar;<br>teacher; exam; star            | 2   |
| togetherness                                                                                | 20  | Id                                                   | 14  |
| one                                                                                         | 12  |                                                      |     |
| nation                                                                                      | 10  |                                                      |     |
| marriage                                                                                    | 9   | <u>Vegetable</u>                                     |     |
| group                                                                                       | 8   | carrot                                               | 70  |
| kingdom; friend;<br>friendship; college;<br>hate                                            | 5   | fruit                                                | 65  |
| space; community;<br>people; separate;<br>units; join; family;<br>tie; state                | 4   | green                                                | 50  |
| split; devoted; smart;<br>wide; liberty; church;<br>football; divided;<br>country; division | 3   | cabbage                                              | 32  |
| fight; parents; glad;<br>many                                                               | 2   | food                                                 | 24  |
| Id                                                                                          | 40  | potato                                               | 22  |
|                                                                                             |     | eat                                                  | 19  |
|                                                                                             |     | garden; grocer                                       | 14  |

Vegetable continued

|                                                         |    |
|---------------------------------------------------------|----|
| grow; peas                                              | 12 |
| oil                                                     | 11 |
| soup                                                    | 9  |
| plant; onion                                            | 8  |
| sprout; flower;<br>cauliflower                          | 5  |
| produce; cook; shop                                     | 4  |
| meat; turnip; patch                                     | 3  |
| vitamins; plate; iron;<br>sick; vegetation;<br>mushroom | 2  |
| Id                                                      | 12 |

Village

|                                  |     |
|----------------------------------|-----|
| town                             | 174 |
| houses                           | 24  |
| people                           | 22  |
| small                            | 19  |
| hall                             | 14  |
| hamlet                           | 10  |
| cottage; green; city             | 9   |
| street; idiot                    | 8   |
| live; square                     | 7   |
| countryside                      | 6   |
| rural; church                    | 5   |
| poor; shop; valley;<br>old; road | 3   |

Village continued

|                                                                   |   |
|-------------------------------------------------------------------|---|
| nice; hut; country;<br>quiet; community;<br>gathering; settlement | 2 |
| Id                                                                | 9 |

To visit

|                                                                                       |     |
|---------------------------------------------------------------------------------------|-----|
| see                                                                                   | 122 |
| go                                                                                    | 43  |
| meet                                                                                  | 18  |
| stay; tourist                                                                         | 10  |
| friend; leave; people;<br>tour                                                        | 9   |
| relations                                                                             | 8   |
| hospital; travel                                                                      | 7   |
| country; home; attend                                                                 | 6   |
| look; place                                                                           | 5   |
| relatives; zoo; come;<br>enter; visitor                                               | 4   |
| welcome; greet; doctor;<br>ran; museum; church;<br>town; return; arrive;<br>enjoyment | 3   |
| old; palace; uncle;<br>deport; guest; trip;<br>theatre; awayday                       | 2   |

|    |    |
|----|----|
| Id | 21 |
|----|----|

War

|       |     |
|-------|-----|
| peace | 190 |
| fight | 30  |



War continued

|                                                                                  |    |
|----------------------------------------------------------------------------------|----|
| death                                                                            | 19 |
| guns                                                                             | 12 |
| soldiers; battle; world                                                          | 10 |
| fear                                                                             | 8  |
| killing; kill                                                                    | 6  |
| dogs; atomic; army;<br>cold; bad; bombs;<br>blood-thirsty                        | 5  |
| attack; dead; tanks                                                              | 4  |
| blood; wound; time;<br>hate; cruel; murder;<br>hateful; injure; die;<br>violence | 3  |
| Id                                                                               | 15 |

To wash

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| clean                                                             | 169 |
| water                                                             | 28  |
| soap                                                              | 26  |
| dirty                                                             | 15  |
| hands; clothes                                                    | 13  |
| face                                                              | 12  |
| bath; dry                                                         | 11  |
| rinse                                                             | 8   |
| cleanliness; up                                                   | 7   |
| scrub; hygienic; sink                                             | 5   |
| car; morning; plates                                              | 4   |
| brush; basin; liquid;<br>wipe; soak; cleaner;<br>cleanse; hygiene | 3   |

To wash continued

|                                                                           |     |
|---------------------------------------------------------------------------|-----|
| bathe; filth; flannel;<br>yourself                                        | 2   |
| Id                                                                        | 15  |
| <u>Washing machine</u>                                                    |     |
| clothes                                                                   | 98  |
| clean                                                                     | 77  |
| wash                                                                      | 37  |
| powder                                                                    | 16  |
| laundry                                                                   | 14  |
| washing; water                                                            | 13  |
| laundrette; soap                                                          | 12  |
| drier                                                                     | 9   |
| dirty; Hoover                                                             | 7   |
| automatic; spin                                                           | 6   |
| help; work; cleaner; wet                                                  | 5   |
| dry; cooker; dirt;<br>detergent; convenience;<br>circle; housework        | 4   |
| quick; noise; electric;<br>fridge                                         | 3   |
| mechanical; Daz; mum;<br>easy; cleanness;<br>jumble; speed;<br>dishwasher | 2   |
| Id                                                                        |     |
| <u>Weak</u>                                                               |     |
| strong                                                                    | 250 |
| feeble                                                                    | 30  |

Weak continued

|                                                     |    |
|-----------------------------------------------------|----|
| ill                                                 | 11 |
| unhealthy                                           | 10 |
| poor; bones; muscles                                | 7  |
| healthy                                             | 6  |
| sick; poverty;<br>physical; heart;<br>humble; young | 4  |
| girl; hard; brave;<br>old; helpless; support        | 3  |
| month; sleep; minded;<br>woman                      | 2  |
| Id                                                  | 15 |

Weapon

|                                    |    |
|------------------------------------|----|
| gun                                | 91 |
| war                                | 73 |
| knife                              | 39 |
| sword                              | 25 |
| spear                              | 20 |
| arms                               | 12 |
| light                              | 11 |
| kill                               | 10 |
| danger; arrow                      | 8  |
| armour; use; bloodshed;<br>defence | 6  |

Wealth

|            |     |
|------------|-----|
| money      | 134 |
| rich       | 80  |
| poor       | 56  |
| health     | 24  |
| poverty    | 17  |
| well (off) | 7   |
| richness   | 6   |

|                                                          |    |
|----------------------------------------------------------|----|
| harm; dagger; armed;<br>power                            | 5  |
| hurt; enemy; shoot;<br>stay                              | 4  |
| battle; destruction;<br>harmful; rocket;<br>missile; axe | 3  |
| dangerous; wicked;<br>peace; hate                        | 2  |
| Id                                                       | 12 |

power; good; fair;  
bank

5

To wear

tax; wise; hand;  
lovely; happiness;  
help

4

Id

17

|         |     |
|---------|-----|
| clothes | 197 |
| put on  | 30  |
| dress   | 24  |
| warm    | 9   |
| out     | 8   |

To wear continued

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| undress; suit; take off;<br>smart                                        | 7  |
| clothing; coat                                                           | 6  |
| tie                                                                      | 5  |
| fashion; trousers;<br>wear; hat                                          | 4  |
| shirt; necklace; strip;<br>jumper; shoes; go out                         | 3  |
| to leave; hot; buy;<br>jacket; boot; hood;<br>happy; slip; show;<br>nice | 2  |
| Id                                                                       | 11 |

To welcome

|                                               |     |
|-----------------------------------------------|-----|
| hallo                                         | 102 |
| greet                                         | 58  |
| home                                          | 24  |
| come in                                       | 21  |
| goodbye                                       | 15  |
| unwelcome                                     | 14  |
| friendly; invite                              | 12  |
| go; like                                      | 8   |
| friend; visit                                 | 7   |
| please; thanks;<br>pleased; warm              | 6   |
| enter; cheerful                               | 5   |
| see off; guest; door;<br>happy; kiss; someone | 4   |

To welcome continued

|                                                                                                                                                                                                                   |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| smile; embrace; rush;<br>happiness; fair; wave;<br>hate; hospital; fare-<br>well; warmly; morning                                                                                                                 | 3 |
| life; brother; hard;<br>husband; enjoy; accepted;<br>mate; admit into;<br>receive; people; com-<br>pany; ignore; pleasing;<br>visitor; accept; accom-<br>pany; close out; joy;<br>humble; you; meet;<br>thank you | 2 |

## Id

West

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| east                                                               | 214 |
| north                                                              | 34  |
| south                                                              | 32  |
| ham                                                                | 23  |
| end                                                                | 12  |
| wild                                                               | 10  |
| Indian; cowboy; America                                            | 5   |
| London; Africa; Indies                                             | 3   |
| cow; compass; nest;<br>country; Texas; rise;<br>climate; land; sun | 2   |
| Id                                                                 | 4   |

Wheat

|        |    |
|--------|----|
| corn   | 83 |
| barley | 59 |

Wheat continued

|                               |    |
|-------------------------------|----|
| bread                         | 50 |
| food                          | 38 |
| cereal                        | 32 |
| field                         | 17 |
| Wheatabix                     | 16 |
| grains                        | 14 |
| flour; cornflakes             | 10 |
| breakfast                     | 9  |
| eat; oats; energy             | 5  |
| shredded; farm; hay;<br>crops | 2  |
| Id                            | 23 |

White

|                                   |     |
|-----------------------------------|-----|
| black                             | 275 |
| colour                            | 33  |
| bright                            | 7   |
| hospital                          | 6   |
| wedding; clean; shirt             | 4   |
| angel; light                      | 3   |
| red; yellow; blue; snow;<br>paint | 2   |
| Id                                | 31  |

Wife

|               |     |
|---------------|-----|
| husband       | 263 |
| woman; mother | 11  |

Wife continued

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| marriage; children                                                    | 9  |
| love                                                                  | 7  |
| sex; kids; man; happy                                                 | 5  |
| family                                                                | 4  |
| slave; ring; cook;<br>father                                          | 3  |
| son; companion; partner;<br>miss; dog; married;<br>Mrs; house; object | 2  |
| Id                                                                    | 11 |

Wine

|                                   |     |
|-----------------------------------|-----|
| drink                             | 139 |
| red; grapes                       | 40  |
| beer                              | 28  |
| dine                              | 20  |
| glass                             | 13  |
| dinner                            | 12  |
| drunk                             | 9   |
| cellar; song                      | 8   |
| booze; champagne; seller          | 7   |
| toast; white; France;<br>bottle   | 6   |
| alcohol; pub                      | 5   |
| nice; spirit; shop                | 4   |
| sherry; whisky; Guinness;<br>food | 3   |
| taste; sweet                      | 2   |
| Id                                | 9   |

Winter

|                                                                                         |     |
|-----------------------------------------------------------------------------------------|-----|
| summer                                                                                  | 185 |
| cold                                                                                    | 86  |
| snow                                                                                    | 54  |
| season                                                                                  | 9   |
| spring                                                                                  | 8   |
| rain                                                                                    | 7   |
| autumn; coat                                                                            | 4   |
| wind; wool; white;<br>sports; terrible; ice;<br>warm; earth; weather;<br>sun; Christmas | 2   |
| Id                                                                                      | 2   |

Woman

|                                                                 |     |
|-----------------------------------------------------------------|-----|
| man                                                             | 289 |
| girl                                                            | 14  |
| female                                                          | 13  |
| lady                                                            | 7   |
| child                                                           | 5   |
| marriage; sex; feminine;<br>old                                 | 4   |
| skirt; nice; mother;<br>beautiful; wife;<br>magazine; boy; tits | 3   |
| enjoyment; babies                                               | 2   |
| Id                                                              | 15  |

Wool

|                                                                             |     |
|-----------------------------------------------------------------------------|-----|
| sheep                                                                       | 117 |
| cotton                                                                      | 103 |
| knit                                                                        | 30  |
| warm                                                                        | 22  |
| lamb                                                                        | 15  |
| soft; jumper                                                                | 12  |
| cardigan; clothes                                                           | 8   |
| knitting; warmth                                                            | 6   |
| fabric; material; wear                                                      | 5   |
| winter; itchy; nappies;<br>weave                                            | 4   |
| fur; needle; garment                                                        | 3   |
| hard; packing; white;<br>worth; blanket;<br>quality; silk; think;<br>length | 2   |
| Id                                                                          | 4   |
| <u>Worker</u>                                                               |     |
| job                                                                         | 52  |
| hard                                                                        | 51  |
| work                                                                        | 36  |
| factory                                                                     | 32  |
| labour                                                                      | 17  |
| labourer                                                                    | 13  |
| money                                                                       | 11  |
| men; employment; dole                                                       | 10  |
| industry; overall; union                                                    | 8   |

| <u>Worker</u> continued                                                 |    | <u>Year</u>                                 |     |
|-------------------------------------------------------------------------|----|---------------------------------------------|-----|
| father; pay                                                             | 7  | month                                       | 190 |
| busy; lazy; builder;<br>social; wage                                    | 6  | day                                         | 60  |
| build; bee; employed;<br>sweat; business;<br>electrician; stink         | 4  | century                                     | 18  |
| employer; manager; dig;<br>technician; foreman;<br>unemployed           | 3  | annual                                      | 11  |
| fed up; engineer; dust-<br>man; postman; free;<br>intelligent; layabout | 2  | leap                                        | 10  |
| Id                                                                      | 9  | week; birthday                              | 9   |
|                                                                         |    | new; age; 1977                              | 7   |
|                                                                         |    | time; date                                  | 6   |
|                                                                         |    | harvest; season                             | 5   |
|                                                                         |    | calendar; decade;<br>projects               | 4   |
| <u>To write</u>                                                         |    | annually; diary; party;<br>old; life; begin | 2   |
| to read                                                                 | 98 | Id                                          | 19  |
| pen                                                                     | 57 |                                             |     |
| letters                                                                 | 55 | <u>Yellow</u>                               |     |
| words                                                                   | 26 |                                             |     |
| book                                                                    | 25 | sun                                         | 48  |
| hand                                                                    | 12 | green                                       | 45  |
| draw                                                                    | 11 | blue                                        | 35  |
| ink                                                                     | 10 | red                                         | 31  |
| works                                                                   | 9  | colour                                      | 30  |
| story                                                                   | 7  | banana                                      | 20  |
| novel                                                                   | 6  | pink                                        | 17  |
| scribble; poems;<br>handwriting                                         | 5  | black; flower; white                        | 10  |
| scribe; essay; note;<br>diary; written; song;<br>learn; perform         | 4  | bright; orange                              | 8   |
| boring; talk; verse;<br>express; paper; sand                            | 3  | submarine; pages; fever;<br>lemon; belly    | 6   |
| type; correspond; arm                                                   | 2  | beer; Chinese; man                          | 5   |
| Id                                                                      | 15 | ribbon; bus; daffodil;<br>brown             | 4   |
|                                                                         |    | scared; grapefruit; lime                    | 3   |

Yellow continued

butter; sick; hair;  
bee; spot; bed; cab;  
melons 2

Id 13

Young

old 224

youth 34

people 11

teens 10

child 8

man; baby 7

boy; happy 6

youngster; person 5

girl; love 4

woman; healthy; life;  
little; kids; vigour 3

youthful; small;  
ambitious; infants;  
innocent; achieve;  
inexperienced 2

Id 13

Youth

young 160

old 71

club 39

age 29

Youth continued

teenager 19

hostel 11

boy 9

children; association 6

pensioner; aged;  
organization 5

team; life; fitness 4

leaver; laugh; joy;  
generation; happy;  
wing; adolescence;  
centre 3

-ful; 16; girl; elder;  
parent; person;  
childhood 2

Id 15

## APPENDIX V

## EGYPTIAN ASSOCIATIVE NORMS

(The phonetic symbols used in the following norms  
are those of the International Phonetic  
Association, 1978.)



N.B.

In the translation of the Egyptian associations from Arabic into English the following dictionaries were consulted:

- 1) The Advanced Learner's Dictionary of Current English,  
London, 1963.
- 2) Al-Mawrid: A Modern English-Arabic Dictionary.  
By Munir Ba'albaki. Beirut, 1971.
- 3) The Collegiate Dictionary: Arabic-English.  
By Edward Elias. Cairo.

\* \* \* \*

The following abbreviations are used:

adj = adjective

c = countable noun

n = noun

v = verb

Un = uncountable noun

| <u>Response</u>                                      | <u>Frequency</u> | <u>Response</u>                                                      | <u>Frequency</u> |
|------------------------------------------------------|------------------|----------------------------------------------------------------------|------------------|
| <u>Active</u>                                        |                  | <u>Aeroplane continued</u>                                           |                  |
| lazy                                                 | 65               | airport; travel (v);<br>pilot; high                                  | 10               |
| strong                                               | 38               | flight ( ); jet                                                      | 7                |
| industrious                                          | 17               | fly (v); flight (U); car                                             | 6                |
| work (n.); weak                                      | 16               | sound (n); bird; ship<br>(n); goods                                  | 5                |
| vitality; laziness;<br>intelligent                   | 15               | freedom; take off (n);<br>space; tank                                | 4                |
| awake (adj.); quick;<br>sport; morning;<br>effort    | 12               | helicopter; clouds;<br>pigeon                                        | 3                |
| working (adj.);<br>activity; successful;<br>athletic | 11               | submarine; military;<br>fear (n); danger                             | 2                |
| brave; clever; negli-<br>gent; refreshed             | 8                | Id                                                                   | 25               |
| peasant; work (v.);<br>moving (adj.)                 | 6                | <u>Agreement</u>                                                     |                  |
| very; exercise (sport);<br>success                   | 5                | peace                                                                | 85               |
| serious; polite                                      | 4                | treaty                                                               | 45               |
| movement                                             | 3                | friendly                                                             | 21               |
| Id                                                   | 15               | Sadat; union                                                         | 12               |
| <u>Aeroplane</u>                                     |                  | international                                                        | 9                |
| travel (n.)                                          | 75               | appointment; under-<br>standing; sincerity;<br>conference            | 8                |
| fast (adj.); bus;<br>rocket (n.)                     | 20               | secret (adj)                                                         | 7                |
| sky; train                                           | 15               | reign (n); reconciliation;<br>friends; just; contract                | 6                |
| seeing off; passengers;<br>atmosphere                | 12               | unity; responsibility;<br>armistice; important;<br>goodness; concord | 5                |

Agreement continued

manhood; engagement  
(military; great;  
society; marriage;  
friendliness;  
friendship; soli-  
darity; interest (n);  
cooperation 4

betrayed; good; countries;  
meeting; discussion 3

guest; work (n);  
secret (n); hero;  
promise (n) 2

Id 31

Apple

fruit 77

orange; delicious 35

red (adj) 28

American; eating 22

sweet (adj) 16

nice 14

rare 13

food; Lebanese;  
expensive; grapes 12

pears; plums 9

peaches; jam 7

banana; vitamins 5

pomegranate; water-  
melon 4

potato; tree 2

Id 20

Arm

hand (n) 84

strength 42

long 31

leg 27

man; foot 14

strong; work (n) 12

body 10

movement 8

struggle (n); help (n);  
progress (n);  
assistant; resistance 7

short; head (n); nose;  
gloves; ability;  
right (adj) 4

fingers; artist; write;  
organ; teeth; blessings;  
injection; important 2

Id 34

Assistant

work (n) 43

aide; manager 22

assist; cooperation 15

participation; Chief (n) 12

work (v) 8

manage; friend; office;  
laboratory 6

messenger; serve; chemist;  
participant; selfish;  
nurse; colleague;  
honest; man; old;

Assistant continued

|                                                                                                                               |    |
|-------------------------------------------------------------------------------------------------------------------------------|----|
| generous; director<br>(drama); teacher;<br>secretary; weak;<br>professor                                                      | 5  |
| engineer; army; school;<br>excellent; goodness;<br>accompany; clinic;<br>doctor; neighbour;<br>aid (n); thanking;<br>minister | 3  |
| Id                                                                                                                            | 67 |

Bad

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| good                                                                                       | 59 |
| wicked                                                                                     | 45 |
| luck                                                                                       | 40 |
| manners                                                                                    | 39 |
| evil (adj); evil (n)                                                                       | 15 |
| failure (person);<br>hated                                                                 | 12 |
| reputation; ugly;<br>polite                                                                | 10 |
| war; dirty                                                                                 | 8  |
| stinking; politeness;<br>very; offence                                                     | 6  |
| lie; booking; stupid;<br>black; wrong (n);<br>environment; sincere;<br>tyrant              | 4  |
| painful; ruler; harmful;<br>donkey; insect; weak;<br>people; neighbour;<br>happy; problems | 2  |
| Id                                                                                         | 40 |

Barber

|                                                                                                                                  |    |
|----------------------------------------------------------------------------------------------------------------------------------|----|
| hair                                                                                                                             | 92 |
| cold (person)                                                                                                                    | 27 |
| hairdresser; man (adj)                                                                                                           | 21 |
| cleanliness                                                                                                                      | 20 |
| head (n)                                                                                                                         | 18 |
| cut (v); ladies (adj);<br>/mizajin/ (the collo-<br>quial name of barber)                                                         | 17 |
| chin; Monday (in Egypt<br>barbers close on<br>Monday); scissors                                                                  | 11 |
| health (health-barber:<br>the name used in the<br>countryside for<br>barbers who also do<br>the job of a doctor);<br>shop; razor | 9  |
| saloon                                                                                                                           | 7  |
| customers; has one's<br>hair cut                                                                                                 | 6  |
| village (adj); work (n);<br>bald                                                                                                 | 5  |
| street; industrious;<br>seller; skilful;<br>perfumes; trimming                                                                   | 2  |
| Id                                                                                                                               | 19 |

Bean

|                                                                                                                      |    |
|----------------------------------------------------------------------------------------------------------------------|----|
| food                                                                                                                 | 54 |
| /taʃmijah/ Flafel<br>(horse-beans, barsley,<br>leak and spices ground<br>together into a soft<br>paste. The paste is |    |

Bean continued

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| cut into small pieces<br>and fried. It is as<br>popular as horse-<br>beans) | 40 |
| eating                                                                      | 38 |
| "Medames" /midamis/<br>(the name of ready-<br>to-eat horse-beans)           | 20 |
| popular; meat                                                               | 15 |
| breakfast; the poor                                                         | 12 |
| wheat                                                                       | 8  |
| eat; oil; protein;<br>bread; sandwich                                       | 7  |
| poverty; Sudanese (in<br>collocation with<br>'bean' means 'peanut')         | 5  |
| nice; barley; school                                                        | 4  |
| morning; nutritious;<br>plant (n)                                           | 3  |
| Id                                                                          | 68 |
| <u>Beautiful</u>                                                            |    |
| ugly                                                                        | 87 |
| pretty                                                                      | 52 |
| Allah                                                                       | 24 |
| nature                                                                      | 22 |
| face (n); appearance                                                        | 16 |
| pleasant                                                                    | 12 |
| magnificent; roses;<br>scene                                                | 9  |
| bad                                                                         | 7  |
| dirty                                                                       | 6  |

Beautiful continued

|                                                                |     |
|----------------------------------------------------------------|-----|
| sea; night; dress (n);<br>colour (n); very;<br>generous        | 5   |
| clothing; love (n);<br>life; woman                             | 4   |
| polite; spring;<br>universe                                    | 3   |
| youth; child; sincerity;<br>patience; good;<br>elegant; animal | 2   |
| Id                                                             | 41  |
| <u>Bed</u>                                                     |     |
| sleep                                                          | 138 |
| rest (n)                                                       | 49  |
| comfortable                                                    | 23  |
| wood; sleep (v)                                                | 20  |
| room; mattress                                                 | 15  |
| large; quilt; wardrobe                                         | 10  |
| chair; double                                                  | 9   |
| pillow; blanket                                                | 8   |
| table; commode                                                 | 6   |
| mat; quiet (n); floor                                          | 4   |
| Id                                                             | 22  |
| <u>Beer</u>                                                    |     |
| taboo                                                          | 91  |
| intoxicant (n)                                                 | 49  |
| drunkenness                                                    | 38  |

Beer continued

|                                                        |    |
|--------------------------------------------------------|----|
| drinking                                               | 35 |
| drink (n)                                              | 23 |
| whiskey                                                | 18 |
| intoxicating                                           | 14 |
| harmful                                                | 10 |
| coca-cola                                              | 8  |
| Stella (a brand name of<br>Egyptian beer)              | 7  |
| yeast (n); drunk                                       | 6  |
| digest; delicious;<br>corruption; debauchery;<br>bad   | 4  |
| wrong; foreign                                         | 3  |
| useful; no; nice; loss;<br>debauch (n); mad;<br>warmth | 2  |
| Id                                                     | 37 |

Bell

|                        |    |
|------------------------|----|
| ring (v)               | 69 |
| school                 | 42 |
| door                   | 35 |
| sound (n)              | 30 |
| ringing; telephone     | 25 |
| warning; alarm; church | 12 |
| disturbing             | 10 |
| attention              | 8  |
| home; disturbance      | 7  |

Bell continued

|                                                               |    |
|---------------------------------------------------------------|----|
| noise; guests                                                 | 5  |
| high; drum                                                    | 4  |
| bicycle; appointment (U);<br>waiting; lesson<br>(school)      | 3  |
| flat; electricity;<br>trumpet (musical<br>instrument); hammer | 2  |
| Id                                                            | 34 |

Bench

|                   |    |
|-------------------|----|
| chair             | 54 |
| sitting           | 41 |
| table             | 32 |
| seat (n)          | 31 |
| wood; school      | 21 |
| classroom         | 19 |
| sofa              | 17 |
| sit               | 15 |
| broken            | 14 |
| doorkeeper        | 13 |
| comfort (n); home | 11 |
| peasants          | 10 |
| countryside       | 9  |
| desk              | 7  |
| mat; long         | 6  |
| study (n)         | 5  |

Bench continued

big; poverty; bed;  
student 4  
Id 24

Bird

sparrow 47  
sky 36  
warbler (adj) 28  
pigeon 25  
tree; animal 17  
aeroplane; freedom 14  
flying 11  
eagle; hawk 9  
sad 8  
beautiful; fly (v) 7  
quick; parrot; seagull;  
land (adj) 6  
bulbul; flying (adj);  
hunting; space;  
rifle; crow 5  
nest; travelling;  
canary; peacock; rep-  
tiles; free; migration;  
warble (n); sea (adj);  
hoopoo 4  
journey; feathers; pet 3  
clouds; night; wing;  
sound (n) 2  
Id 27

Birthday

happy 85  
celebration 37  
joy; present (n) 27  
party 25  
happiness 19  
memory (something that  
is remembered) 18  
age 15  
assembly; life;  
congratulate 11  
occasion; birth; cake 9  
duty; death; guests;  
congratulation;  
candles 6  
New Year' Day; gateaux 5  
nice; friend; group (n);  
Christ; Christmas;  
tea; year 4  
beginning; necessary;  
child 2  
Id 20

Biscuit

child 77  
tea 31  
delicious; eating 27  
chocolate 22  
nice; food 21

Biscuit continued

|                                                                   |    |
|-------------------------------------------------------------------|----|
| flour                                                             | 17 |
| breakfast                                                         | 12 |
| sweets; Corona (a brand<br>of biscuit)                            | 7  |
| cream; bread; Ika<br>/?i:ka/ (a brand of<br>biscuit)              | 6  |
| feast; milk; cake                                                 | 5  |
| vanilla; grocer; light                                            | 4  |
| sweetness; seller;<br>Arabisquo /?rabisku/<br>(a kind of biscuit) | 3  |
| useful; hunger; cheap;<br>school; slimming;<br>cocoa; factory     | 2  |
| Id                                                                | 23 |

Black

|                         |     |
|-------------------------|-----|
| white                   | 120 |
| sadness                 | 35  |
| colour; red             | 30  |
| death                   | 25  |
| night; pessimism        | 17  |
| darkness; dark          | 12  |
| war; green; evil        | 8   |
| sad; blackboard         | 6   |
| trousers                | 5   |
| gloomy; despair; day(U) | 3   |
| sea; yellow             | 2   |
| Id                      | 28  |

Blanket

|                                    |     |
|------------------------------------|-----|
| warmth                             | 125 |
| cover (n)                          | 55  |
| quilt                              | 50  |
| sleeping                           | 21  |
| cold (n)                           | 20  |
| winter                             | 18  |
| bed; wool                          | 15  |
| sleep (v); pillow                  | 5   |
| protect                            | 4   |
| large; mattress                    | 3   |
| thick; cover (v); sheet;<br>heater | 2   |
| Id                                 | 35  |

Blouse

|                                                                |    |
|----------------------------------------------------------------|----|
| clothing (U)                                                   | 50 |
| shirt                                                          | 45 |
| nice; girl                                                     | 35 |
| skirt                                                          | 22 |
| dress (n)                                                      | 20 |
| woman; red (adj); cotton;<br>cloth (U)                         | 10 |
| jacket; white; short;<br>put on                                | 8  |
| expensive                                                      | 7  |
| vest (garment); coat (n)                                       | 6  |
| sewing; yellow; new;<br>green; chich (adj);<br>sister; uniform | 4  |



Blouse continued

clean (adj); body;  
school 2  
Id 33

Blue

sky 99  
colour (n) 62  
red (n) 45  
white (n) 23  
green 20  
the Nile; light blue 9  
clearness 8  
yellow; black 7  
bright; sky blue 6  
coloured; wave (n) 4  
sad 3  
beautiful; mysterious;  
dark (adj); violet (U) 2  
Id 25

Body

strong 50  
man (human being) 35  
trunk (body without head,  
arms or legs) 18  
animal 16  
leg; health; heart 12

Body continued

foot; chest; corpus 10  
big; creature; mind 8  
active; painful;  
exhausted 7  
upright; food;  
strenght; blood;  
beautiful 6  
shirt; necessary;  
buffalo; flesh; fit  
(adj); disease 5  
girl; cells (microscopic  
units of living matter);  
athletic; graceful 4  
sports; life; ill (adj);  
abdomen; sex; muscles;  
skeleton; grace; weak;  
flexible; alive; motion;  
sitting; eye; cleanli-  
ness 3  
Id 41

Book

notebook 60  
reading 34  
study (n) 29  
culture 22  
friend; science 18  
pen; read 15  
education; story;  
library 10  
benefit (v) 7  
knowledge; study (v);  
nice; ideas; reader;  
interesting 6

Book continued

|                                                                                |    |
|--------------------------------------------------------------------------------|----|
| companion; weapon                                                              | 5  |
| paper; large; enter-<br>tainment; hobby;<br>instructor; magazine;<br>chemistry | 4  |
| understanding; student;<br>psychology                                          | 2  |
| Id                                                                             | 35 |

Brave

|                                                                                           |     |
|-------------------------------------------------------------------------------------------|-----|
| strong                                                                                    | 105 |
| coward                                                                                    | 39  |
| soldier                                                                                   | 22  |
| hero; lion                                                                                | 21  |
| weak                                                                                      | 20  |
| great                                                                                     | 15  |
| strength                                                                                  | 12  |
| frightened; men                                                                           | 8   |
| man; war; intrepid                                                                        | 7   |
| Sadat                                                                                     | 6   |
| youth; patient (having<br>patience); adventurer                                           | 5   |
| dareness; valiant;<br>knight; Arab; intre-<br>pidity; clever                              | 4   |
| intelligence; active;<br>army; fear (v); wise;<br>loved (adj); negli-<br>gent; very; huge | 2   |
| Id                                                                                        | 40  |

Bread

|                                                                                                                                     |    |
|-------------------------------------------------------------------------------------------------------------------------------------|----|
| food                                                                                                                                | 80 |
| /ʕeiʃ/ (in the Arabic<br>version 'bread' was<br>translated into 'Khubz'<br>/xubz/. /ʕeiʃ/ is a<br>colloquial synonym of<br>'Khubz') | 45 |
| wheat                                                                                                                               | 42 |
| eat                                                                                                                                 | 16 |
| flour; barley; 'fino'<br>/finu/ (a kind of<br>bread similar to French<br>bread)                                                     | 12 |
| bran; 'Baladi' /baladi/<br>(the main popular kind<br>of bread made of flour<br>(including bran))                                    | 10 |
| maize; baker                                                                                                                        | 8  |
| blessing; life                                                                                                                      | 7  |
| brown                                                                                                                               | 6  |
| hunger; crowds; smell;<br>beans (horse); people<br>(persons of state)                                                               | 5  |
| crunchy; buying                                                                                                                     | 4  |
| cheese; meat                                                                                                                        | 3  |
| milk (n); cake; white;<br>necessary; butter;<br>barley; hot; misery;<br>clean (adj); fresh;<br>bake; America                        | 2  |
| Id                                                                                                                                  | 22 |

Breakfast

|                                                                                                |    |
|------------------------------------------------------------------------------------------------|----|
| morning                                                                                        | 50 |
| 'foul'                                                                                         | 43 |
| supper                                                                                         | 27 |
| food; nutrition                                                                                | 25 |
| eating                                                                                         | 22 |
| delicious                                                                                      | 20 |
| tea                                                                                            | 15 |
| milk (n)                                                                                       | 10 |
| light (adj)                                                                                    | 9  |
| fasting                                                                                        | 8  |
| school; cheese                                                                                 | 7  |
| Ramadan (the month<br>during which Moslems<br>fast daily from sunrise<br>to sunset); meal; egg | 6  |
| nutritious; good; jam;<br>family; bread; hunger                                                | 4  |
| sunset                                                                                         | 2  |
| Id                                                                                             | 44 |

Brother

|                               |     |
|-------------------------------|-----|
| sister                        | 136 |
| friend                        | 35  |
| full-brother; elder           | 15  |
| sincere                       | 12  |
| relative                      | 11  |
| father; kindness;<br>love (n) | 10  |
| beloved; friendship           | 9   |

Brother continued

|                                                                                                                                                              |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| dominance                                                                                                                                                    | 7  |
| mother; polite                                                                                                                                               | 5  |
| sharing; good; sympathy;<br>young; boy; tender                                                                                                               | 4  |
| companion; hope (n);<br>assistant                                                                                                                            | 3  |
| nice; man; tie (n);<br>generous; school;<br>sincere; understanding;<br>corrupt (adj); uncle;<br>heart; security;<br>flexibility; colleague;<br>wise; protect | 2  |
| Id                                                                                                                                                           | 24 |

Buffalo

|                                                   |    |
|---------------------------------------------------|----|
| milk (n)                                          | 70 |
| cow                                               | 66 |
| animal                                            | 21 |
| big                                               | 15 |
| meat                                              | 12 |
| peasant; village; donkey                          | 11 |
| countryside; goodness;<br>butter; town            | 10 |
| food                                              | 9  |
| mild                                              | 8  |
| plough (v); waterwheel;<br>giving (n)             | 7  |
| field; useful                                     | 6  |
| sheep; cheese; cattle                             | 5  |
| life; work (n); black;<br>blessing; helping (adj) | 4  |
| horns; ignorance                                  | 3  |
| Id                                                | 29 |

To build

|                                                                                                                              |    |
|------------------------------------------------------------------------------------------------------------------------------|----|
| demolish                                                                                                                     | 99 |
| house                                                                                                                        | 58 |
| construct                                                                                                                    | 35 |
| establishment (U)                                                                                                            | 15 |
| erect (v); construc-<br>tion; Egypt; engineer                                                                                | 8  |
| mosque (mosque for<br>Moslems is like the<br>church for Christians);<br>school; building (U);<br>life; make;<br>urbanization | 5  |
| work (n); found (v);<br>design (v)                                                                                           | 4  |
| cement (n); reform (n);<br>strive; pyramid;<br>hospital; future;<br>lofty (of great height);<br>bricks; carpentry            | 3  |
| effort; eve; innovation;<br>art; architecture                                                                                | 2  |
| Id                                                                                                                           | 23 |

Bus

|                                                                  |    |
|------------------------------------------------------------------|----|
| crowd (n)                                                        | 93 |
| transport (n) (of or<br>for carrying, con-<br>veying)            | 42 |
| riding in                                                        | 29 |
| Saiarah /sajarah/ (the<br>synonym of bus in<br>classical Arabic) | 25 |
| car                                                              | 22 |
| passengers                                                       | 19 |

Bus continued

|                                                                                |    |
|--------------------------------------------------------------------------------|----|
| tram                                                                           | 16 |
| taxi; conveyance (U)                                                           | 13 |
| stop (n); crowded;<br>fast (adj)                                               | 7  |
| rocket (n); difficulty;<br>late (adj); bicycle;<br>exhaustion; route;<br>chair | 5  |
| city; moving (n);<br>aeroplane; train (n);<br>travel (n); people; red          | 3  |
| Id                                                                             | 25 |

Butcher

|                                                       |     |
|-------------------------------------------------------|-----|
| meat                                                  | 210 |
| thief; seller; grocer                                 | 15  |
| knife                                                 | 10  |
| swindler; rich (n);<br>profit (n); expensive          | 9   |
| cheat (n); greedy                                     | 8   |
| slaughtered animals;<br>merchant; slaughter-<br>house | 7   |
| cow; strength;<br>slaughter (v)                       | 6   |
| chopper; money; dirty;<br>gluttonous                  | 5   |
| family; sheep                                         | 4   |
| Id                                                    | 10  |

Butter

|                                                                      |    |
|----------------------------------------------------------------------|----|
| natural fat (melted butter)                                          | 65 |
| cheese (the main kind of cheese in Egypt is known as 'white cheese') | 59 |
| eating                                                               | 34 |
| milk (n)                                                             | 25 |
| cream                                                                | 18 |
| fats; food                                                           | 15 |
| white                                                                | 12 |
| nice; buffalo; melted                                                | 10 |
| jam; honey; cow                                                      | 8  |
| yellow; delicious                                                    | 7  |
| expensive; peasants                                                  | 6  |
| nutritious; cake; useful                                             | 4  |
| sour; beans (horse-); margarine; breakfast                           | 3  |
| eat; egg; vitamin; village; cooking; bread; wheat                    | 2  |
| Id                                                                   | 14 |

To buy

|                       |     |
|-----------------------|-----|
| sell                  | 200 |
| market (n)            | 16  |
| money; take; pay      | 15  |
| loss; profit (n)      | 12  |
| clothing (collective) | 10  |

To buy continued

|                                                                                                   |    |
|---------------------------------------------------------------------------------------------------|----|
| shop (n); capital                                                                                 | 8  |
| articles (particular or separate things)                                                          | 6  |
| shirt; food; vegetables; profit (v); people; meat; goods                                          | 4  |
| cloth (U); rich; live; eat                                                                        | 3  |
| use (v); orange; enjoy; fruit; put on; cabbage; look; banana; wealth; spend; luxury; suit; seller | 2  |
| Id                                                                                                | 20 |

Cabbage

|                                                                                                                                                             |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| cauliflower                                                                                                                                                 | 55 |
| 'Mahshy /mahʃi/ (a very popular food in Egypt. Cabbage leaves are cut and boiled, then stuffed with rice, parsley, spices and tomato sauce and then cooked) | 50 |
| food                                                                                                                                                        | 40 |
| eating; vegetable                                                                                                                                           | 35 |
| pot-herbs                                                                                                                                                   | 20 |
| rice; delicious                                                                                                                                             | 16 |
| green; popular                                                                                                                                              | 12 |
| pepper (green); pickle (v)                                                                                                                                  | 10 |
| eat; turnip; stuff (v)                                                                                                                                      | 8  |

Cabbage continued

|                                                                    |    |
|--------------------------------------------------------------------|----|
| winter; butter; plant<br>(n); heavy; soil;<br>cooking; onion       | 5  |
| tomato; effort; market<br>(n); field; eggplant;<br>growing; rabbit | 4  |
| bad; white; blessing;<br>kojak; water-melon;<br>nutritious         | 2  |
| Id                                                                 | 25 |

Camel

|                                                             |    |
|-------------------------------------------------------------|----|
| desert (Sahara)                                             | 90 |
| donkey                                                      | 30 |
| animal                                                      | 25 |
| patience; tolerance                                         | 20 |
| desert-ship                                                 | 15 |
| transportation; big;<br>bedouin                             | 12 |
| meat; tall; she-camel                                       | 10 |
| horse; patient (adj)                                        | 9  |
| thirst; heavyweight;<br>pyramids                            | 6  |
| ride (v); hardship                                          | 5  |
| journey; cow; saddle                                        | 4  |
| lion; expensive; yellow;<br>sitting; slow; poor;<br>tractor | 2  |
| Id                                                          | 35 |

Car

|                                                             |    |
|-------------------------------------------------------------|----|
| bus                                                         | 45 |
| 'autobis' /utubi:s/<br>(the colloquial syno-<br>nym of bus) | 20 |
| train (n); speed                                            | 18 |
| transport; getting in                                       | 16 |
| rest (n); big; travel(n)                                    | 15 |
| aeroplane; Fiat                                             | 12 |
| richness; small                                             | 10 |
| get in; driving;<br>passengers                              | 9  |
| petrol; tram; money;<br>Mercedes                            | 8  |
| driver; fast (adj);<br>expensive; traffic                   | 7  |
| taxi; picnic; visit (n)                                     | 5  |
| new; Volkswagen                                             | 4  |
| journey; donkey; bicycle                                    | 3  |
| white; street                                               | 2  |
| Id                                                          | 45 |

Carpet

|                                                |    |
|------------------------------------------------|----|
| 'Kleem' /kli:m/ (mat<br>made of cloth or wool) | 55 |
| cloth (as in table-cloth)                      | 31 |
| spread                                         | 19 |
| patterned; wool; saloon                        | 15 |
| chandelier                                     | 12 |
| mat                                            | 9  |
| home; room; beautiful;<br>floor                | 6  |

Carpet continued

|                                                                                                           |    |
|-----------------------------------------------------------------------------------------------------------|----|
| big; long; rug                                                                                            | 4  |
| table; curtain; furniture; clean (adj);<br>coloured; pile (U);<br>decoration; warmth;<br>prayers; textile | 2  |
| Id                                                                                                        | 65 |

Cat

|                                                                   |    |
|-------------------------------------------------------------------|----|
| dog                                                               | 75 |
| animal                                                            | 55 |
| pet                                                               | 48 |
| mouse                                                             | 36 |
| beautiful                                                         | 28 |
| betrayal                                                          | 15 |
| betrayed; cunning (n);<br>amusement                               | 14 |
| little                                                            | 10 |
| pussy                                                             | 5  |
| big; naughty; paws;<br>scratch (n);<br>cunning (adj);<br>pampered | 4  |
| run; sound; useful                                                | 2  |
| Id                                                                | 33 |

Cauliflower

|            |    |
|------------|----|
| cabbage    | 99 |
| eating     | 44 |
| vegetables | 35 |

Cauliflower continued

|                                              |    |
|----------------------------------------------|----|
| food                                         | 30 |
| fried; bad                                   | 19 |
| oil (cooking); eat                           | 11 |
| egg-plant                                    | 10 |
| egg                                          | 9  |
| market; nice; protein;<br>cucumber           | 6  |
| flatulence; delicious                        | 5  |
| useful; plant; tomato<br>puree; rice; field  | 2  |
| Id                                           | 40 |
| <u>To celebrate</u>                          |    |
| feast                                        | 79 |
| birthday                                     | 58 |
| joy; rejoice; invite                         | 25 |
| party                                        | 20 |
| welcome (v)                                  | 19 |
| congratulate                                 | 18 |
| happy                                        | 12 |
| occasion; success                            | 10 |
| happiness; marriage                          | 7  |
| assemble; sing; respect<br>(v)               | 5  |
| remember; friends;<br>honour (v); make happy | 4  |
| successful; harm; New<br>Year's Day          | 2  |
| Id                                           | 65 |

Chair

|                                                |    |
|------------------------------------------------|----|
| seat                                           | 62 |
| wood                                           | 47 |
| table                                          | 45 |
| sitting                                        | 30 |
| rest (n); useful                               | 25 |
| saloon; sofa                                   | 15 |
| classroom                                      | 14 |
| carpentry; blackboard;<br>desk; bench          | 9  |
| waiting room                                   | 8  |
| broken; fixed (cannot<br>be moved); big; small | 7  |
| nice; window                                   | 4  |
| strong; important                              | 3  |
| Id                                             | 27 |

Cheese

|                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------|----|
| butter                                                                                                             | 44 |
| milk (n)                                                                                                           | 43 |
| white (white cheese is<br>the name of the main<br>kind of cheese in<br>Egypt. It is similar<br>to cottage cheese.) | 36 |
| food                                                                                                               | 31 |
| Turkish (a kind of cheese<br>similar to Edam);<br>sandwiches                                                       | 14 |
| Halva /hala:wah/ (sweet<br>substance made of<br>sugar and tahini)                                                  | 8  |

Cheese continued

|                                          |    |
|------------------------------------------|----|
| eggs; olives                             | 6  |
| bread; fats; useful;<br>breakfast        | 5  |
| salty; yellow; old; cow;<br>creamy; meat | 4  |
| Id                                       | 55 |

Chess

|                                                                           |     |
|---------------------------------------------------------------------------|-----|
| intelligence                                                              | 105 |
| game (n)                                                                  | 50  |
| backgammon; thinking                                                      | 25  |
| amusement                                                                 | 20  |
| thought                                                                   | 12  |
| hobby; intelligent                                                        | 10  |
| cards; mind (n)                                                           | 8   |
| king; useful                                                              | 7   |
| art; football; play (v);<br>Dominos                                       | 5   |
| enjoyment; exciting;<br>board; plan (n);<br>wood; competition;<br>soldier | 4   |
| battle (n); brain;<br>leisure                                             | 3   |
| lido; billiard; learn;<br>war; nice                                       | 2   |
| Id                                                                        | 20  |



Child

|                                                                               |    |
|-------------------------------------------------------------------------------|----|
| young                                                                         | 55 |
| sucker; innocence                                                             | 38 |
| innocent                                                                      | 23 |
| man                                                                           | 16 |
| cry (v); mother                                                               | 15 |
| sucking                                                                       | 11 |
| milk (n); kindness;<br>beautiful                                              | 10 |
| crying                                                                        | 9  |
| happy                                                                         | 8  |
| chocolate                                                                     | 7  |
| play (n)                                                                      | 6  |
| hope (n); toys; angel                                                         | 5  |
| play (v); tenderness;<br>responsibility; pregnancy;<br>noise; naughty; youth  | 4  |
| obedient; woman; aid(n);<br>life; welfare; nursery;<br>expensive; future; boy | 3  |
| man; kindness; beginning;<br>spring; truth; eating;<br>happy; biscuit; old    | 2  |
| Id                                                                            | 12 |

Chocolate

|             |    |
|-------------|----|
| delicious   | 67 |
| sweet (n)   | 65 |
| sweet (adj) | 37 |
| child       | 35 |

Chocolate continued

|                                                |    |
|------------------------------------------------|----|
| biscuits                                       | 25 |
| milk (n)                                       | 20 |
| expensive                                      | 15 |
| nice; cocoa; brown (adj)                       | 10 |
| eating; nuts; childhood                        | 8  |
| sugar; cafeteria;<br>useful; seller            | 3  |
| greengrocer; corona;<br>almond; money; amusing | 2  |
| Id                                             | 30 |

Cigarette

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| smoke (n)                                                                       | 55 |
| drinking (in Arabic it<br>is said: to drink a<br>cigarette); harmful            | 35 |
| harm (n)                                                                        | 25 |
| temperament                                                                     | 12 |
| harm (n)                                                                        | 17 |
| cigar; health                                                                   | 15 |
| pipe (tobacco); smoke(n)                                                        | 10 |
| danger; nervousness                                                             | 8  |
| disease; harm (v);<br>temperament                                               | 6  |
| broadcast (n); burn (v)                                                         | 5  |
| tired; sad; worries;<br>enjoyment; thinking;<br>think                           | 3  |
| breathe; die; eat;<br>stupid; fool (n); Kent;<br>donkey; bad; lose;<br>Marlboro | 2  |
| Id                                                                              | 38 |

| <u>Cinema</u>                                                                                                                                                                  |    | <u>City</u> continued                                                           |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------|-----|
| film (n)                                                                                                                                                                       | 80 | small town                                                                      | 8   |
| theatre                                                                                                                                                                        | 45 | activity; university<br>(adj); tourist (adj);                                   |     |
| television                                                                                                                                                                     | 35 | Nasser                                                                          | 6   |
| entertainment;<br>amusement                                                                                                                                                    | 30 | society; transports;<br>Tanta; Alexandria;<br>shops; industrial                 | 5   |
| interesting; viewing                                                                                                                                                           | 15 | floating; progress (n);<br>great; quiet; peoples;<br>governorate; buildings     | 4   |
| luxury; studio; big                                                                                                                                                            | 9  |                                                                                 |     |
| culture                                                                                                                                                                        | 7  | Paris; life; clean (adj);<br>meeting; Mecca; persons;<br>New York; heros; house | 2   |
| desirable; spectators;<br>comfort (n); enjoy-<br>ment; play (drama);<br>film (roll); actor;<br>going for a walk;<br>jobby; pleasure; fun-<br>fair; recreation;<br>passing time | 2  | Id                                                                              | 14  |
| Id                                                                                                                                                                             | 49 | <u>Cloud</u>                                                                    |     |
|                                                                                                                                                                                |    | rain (n)                                                                        | 140 |
|                                                                                                                                                                                |    | sky                                                                             | 74  |
|                                                                                                                                                                                |    | fogs; white (adj)                                                               | 23  |
| <u>City</u>                                                                                                                                                                    |    | space                                                                           | 17  |
| village                                                                                                                                                                        | 71 | winter                                                                          | 12  |
| Cairo                                                                                                                                                                          | 20 | clear (adj)                                                                     | 11  |
| state (political)                                                                                                                                                              | 19 | atmosphere                                                                      | 9   |
| big                                                                                                                                                                            | 18 | darkness; Allah                                                                 | 5   |
| countryside                                                                                                                                                                    | 17 | black; blue; aeroplane;<br>accumulative                                         | 4   |
| capital                                                                                                                                                                        | 15 | dark                                                                            | 2   |
| beautiful; crowds;<br>people; noise                                                                                                                                            | 12 | Id                                                                              | 37  |
| modern; crowded;<br>lights                                                                                                                                                     | 11 |                                                                                 |     |
| civilization; streets                                                                                                                                                          | 9  |                                                                                 |     |

Coat

|                                                                                                                                        |    |
|----------------------------------------------------------------------------------------------------------------------------------------|----|
| winter                                                                                                                                 | 83 |
| warmth                                                                                                                                 | 69 |
| coldness; long                                                                                                                         | 24 |
| clothing                                                                                                                               | 20 |
| jacket                                                                                                                                 | 18 |
| warm (adj)                                                                                                                             | 15 |
| wool                                                                                                                                   | 12 |
| rain (n)                                                                                                                               | 11 |
| warm (v)                                                                                                                               | 7  |
| robe; wear; leather                                                                                                                    | 5  |
| protection; dress (n);<br>trousers; suit; heavy                                                                                        | 4  |
| beautiful; loose;<br>clean (adj); doctor;<br>red; white; protect;<br>cloth (U); summer (adj);<br>shirt; black; chic;<br>suede; blanket | 2  |
| Id                                                                                                                                     | 23 |

Coffee

|                                |     |
|--------------------------------|-----|
| tea                            | 115 |
| cup                            | 77  |
| drink (n)                      | 27  |
| coffee; powder;<br>temperament | 21  |
| stimulant                      | 16  |
| drinking                       | 15  |
| delicious                      | 12  |
| cigarette                      | 9   |

Coffee continued

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| Brazilian                                                                 | 6  |
| harm (n)                                                                  | 5  |
| nerves; headache; sugar;<br>without sugar;<br>insomnia; bitter;<br>casino | 4  |
| brown; harmful                                                            | 2  |
| Id                                                                        | 25 |

To congratulate

|                                                                                       |    |
|---------------------------------------------------------------------------------------|----|
| success                                                                               | 85 |
| joy                                                                                   | 60 |
| bless (v)                                                                             | 21 |
| congratulations!; thank                                                               | 15 |
| successful; rejoice                                                                   | 14 |
| condole; celebrate;<br>shake hands; make<br>happy; compliment (v);<br>happy; telegram | 7  |
| appreciation; colleague;<br>marriage                                                  | 6  |

weep; duty; welcome (v);  
winner; glorify; feast;  
happiness 4

sincere; reward (v);  
encourage; examination 2

Id 47

To cook

|        |    |
|--------|----|
| food   | 51 |
| eating | 47 |

To cook continued

|                                        |    |
|----------------------------------------|----|
| mother                                 | 41 |
| eat                                    | 39 |
| 'yathy' /jathi/<br>(classical synonym) | 28 |
| kitchen                                | 27 |
| woman; wife                            | 18 |
| cook (n)                               | 15 |
| prepare                                | 14 |
| potato; vegetable                      | 12 |
| okra; 'meloukhiah'                     | 9  |
| meat; lentils                          | 5  |
| Id                                     | 30 |

Cotton

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| clothing (U, collective)                                                 | 50 |
| white                                                                    | 35 |
| wheat                                                                    | 20 |
| wool; crops; export (n);<br>textile                                      | 15 |
| long-staple; growing                                                     | 12 |
| Egyptian; Egypt                                                          | 9  |
| white gold; cloth (U);<br>grow; medical;<br>wealth; weaving;<br>spinning | 7  |
| plant (n); warm (v);<br>goodness                                         | 5  |
| seeds; manufacture (v);<br>rice                                          | 4  |

Cotton continued

|                                                                              |    |
|------------------------------------------------------------------------------|----|
| flax; pillow; country-<br>side; sugar-cane;<br>trade (n); medium-<br>staple  | 3  |
| bed; flower; economy;<br>significance; gin;<br>purity; jacket;<br>import (n) | 2  |
| Id                                                                           | 25 |

Cow

|                                                      |     |
|------------------------------------------------------|-----|
| milk (n)                                             | 135 |
| buffalo                                              | 75  |
| animal; meat                                         | 35  |
| countryside                                          | 10  |
| milch; natural fat                                   | 8   |
| big; cheese                                          | 7   |
| yellow (adj); wealth                                 | 6   |
| useful; butter                                       | 5   |
| village; milk (v);<br>waterwheel; clover;<br>peasant | 4   |
| field                                                | 2   |
| Id                                                   | 15  |

Cup

|                |     |
|----------------|-----|
| tea            | 165 |
| coffee         | 147 |
| glass (vessel) | 45  |
| saucer         | 10  |

Cup continued

|                                      |   |
|--------------------------------------|---|
| drink                                | 9 |
| coffee-powder;<br>astrologer; legend | 2 |
| Id                                   | 4 |

To Dance

|                                                                   |    |
|-------------------------------------------------------------------|----|
| sing; happiness                                                   | 55 |
| play (v)                                                          | 25 |
| art; rejoice                                                      | 20 |
| theatre; party                                                    | 15 |
| music                                                             | 10 |
| cinema; movement;<br>belly (dancing)                              | 8  |
| amusement; sway (v)                                               | 7  |
| happy; casino; taboo;<br>dancer; drum; applaud;<br>club; pyramids | 5  |
| chaos; nice; grace; boy                                           | 4  |
| women; move (v); play (n);<br>horse; enjoyment                    | 3  |
| hobby; tenderness;<br>jump (v)                                    | 2  |
| Id                                                                | 38 |

Daughter

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| son                                                                 | 110 |
| mother                                                              | 27  |
| uncle (father's brother).<br>(The response is a<br>collocation with |     |

Daughter continued

|                                                                                                       |    |
|-------------------------------------------------------------------------------------------------------|----|
| 'daughter' which is<br>equivalent to 'cousin'<br>in English)                                          | 21 |
| uncle (mother's brother)<br>(The response is also<br>a collocation with the<br>same meaning 'cousin') | 21 |
| father; girl                                                                                          | 19 |
| sister                                                                                                | 18 |
| love (n)                                                                                              | 17 |
| aunt (father's sister)                                                                                | 11 |
| honour (n); kindness                                                                                  | 8  |
| marriage; obedient                                                                                    | 7  |
| relative (n); young                                                                                   | 6  |
| family; beautiful;<br>beloved; sincere                                                                | 5  |
| tie (n); breeding;<br>bride; friend;<br>polite; wife; sincerity                                       | 4  |
| heart                                                                                                 | 3  |
| child; pleasant;<br>respect (n)                                                                       | 2  |
| Id                                                                                                    | 14 |
| <u>Day</u>                                                                                            |    |
| month                                                                                                 | 61 |
| year                                                                                                  | 41 |
| hour                                                                                                  | 39 |
| happy                                                                                                 | 30 |
| beautiful                                                                                             | 29 |
| week                                                                                                  | 27 |

Day continued

Friday 15

time (n); all the days  
of all the past,  
present and future;  
day (U) 12

long 11

date; short; work (n) 7

·holiday 6

feast; life; birth;  
morning; lost; pass(v) 5new; full of; tomorrow;  
Allah 4

Id 29

Deep

sea 70

well (water) 45

shallow 35

long; thought 20

large; short; sleep (n) 10

far; science 8

ocean; fear (n);  
sense (n); danger 6

hole; shy; heart; low 5

high; superficial;  
light (adj) 4very; near; lofty;  
intelligence 2

Id 45

Desert

barren 79

sands 47

camel 28

thirst 23

unfertile 19

large; yellow 17

eastern; space 12

empty; western 10

empty space; sun 8

loneliness; dismal;  
Egypt; heat (n);  
Sinai 7tent; expatriation;  
storm; mountains 6

fear; stillness; quiet(n) 4

water; plants; green 2

Id 19

Dog

animal 65

cat 55

faithfulness 30

mouse 20

bones 17

honest 14

pet 12

brave; stray (n) 11

guard (n); friend 10

|                                                                                                       |    |                                             |    |
|-------------------------------------------------------------------------------------------------------|----|---------------------------------------------|----|
| <u>Dog continued</u>                                                                                  |    | <u>Door</u>                                 |    |
| barking; sociable                                                                                     | 9  | window                                      | 90 |
| strong; guard (state of<br>watchfulness                                                               | 7  | room                                        | 24 |
| brute (animal);<br>faithful; honesty;<br>disturbing; wild (adj);<br>mad                               | 6  | key                                         | 23 |
| tiger; fast (adj); huge;<br>evil; intelligent                                                         | 5  | closed; house; exit (n)                     | 22 |
| donkey; nice; sincere;<br>tail; lion; hospital;<br>garden; chair                                      | 4  | entering; wood                              | 19 |
| Id                                                                                                    | 29 | open (v); open (adj)                        | 17 |
|                                                                                                       |    | close (v); doorman                          | 12 |
|                                                                                                       |    | knock (v)                                   | 8  |
|                                                                                                       |    | classroom                                   | 7  |
|                                                                                                       |    | bell; paradise; heaven                      | 4  |
|                                                                                                       |    | dam; school                                 | 3  |
| <u>Donkey</u>                                                                                         |    | life; big; success;<br>happiness; carpenter | 2  |
| animal                                                                                                | 80 | Id                                          | 23 |
| stupid; stupidity                                                                                     | 35 |                                             |    |
| horse                                                                                                 | 25 | <u>Dress</u>                                |    |
| ass; ride (v)                                                                                         | 15 | girl                                        | 62 |
| patience; riding                                                                                      | 12 | beautiful; wear (U)                         | 45 |
| she-ass                                                                                               | 10 | blouse                                      | 20 |
| beast; strong; noise                                                                                  | 8  | woman                                       | 15 |
| slow (adj); village;<br>clover                                                                        | 6  | lady                                        | 12 |
| dog; braying                                                                                          | 5  | shirt; skirt; handsome;<br>suit             | 10 |
| help (n); help (v);<br>fast (adj); intelli-<br>gent; bray; buffalo;<br>walk (v); peasant;<br>pyramids | 2  | smartness; trousers                         | 9  |
| Id                                                                                                    | 45 | wear (v); red (adj);<br>'Galabeya'; cotton  | 8  |

Dress continued

|                                                                         |    |
|-------------------------------------------------------------------------|----|
| appearance (look);<br>going for a walk;<br>long; pyjama; coat           | 5  |
| bride; night out; white                                                 | 4  |
| black; new; short;<br>shoes; tailoring;<br>colours; patterned;<br>party | 3  |
| sister; cloth (U); feast;<br>beauty; money; child<br>(girl)             | 2  |
| Id                                                                      | 25 |

To drink

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| water (n)                                                                              | 85 |
| eat                                                                                    | 65 |
| milk (n)                                                                               | 55 |
| tea; thirsty                                                                           | 25 |
| thirst                                                                                 | 20 |
| water (v)                                                                              | 12 |
| coffee (ground); juice                                                                 | 10 |
| live                                                                                   | 8  |
| cigarette (in Arabic it<br>is said: to drink a<br>cigarette; meaning<br>'to smoke it') | 7  |
| coca-cola; drinking;<br>glass                                                          | 5  |
| wine; cocoa                                                                            | 4  |
| mouth; eating; wash (v);<br>medicine                                                   | 2  |
| Id                                                                                     | 29 |

To drive

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| car                                                                | 126 |
| 'yasouq' /jasu:??/<br>(colloquial synonym)                         | 56  |
| bus                                                                | 38  |
| plane                                                              | 22  |
| walk (v)                                                           | 27  |
| preside over                                                       | 12  |
| leader; army; driver                                               | 9   |
| rule (v)                                                           | 7   |
| stand (v)                                                          | 5   |
| revolt (v); help (v);<br>slowness; hold (v);<br>quickly; battalion | 4   |
| sleep; boat; neglect;<br>keep                                      | 2   |
| Id                                                                 | 44  |

To eat

|                                              |    |
|----------------------------------------------|----|
| drink (v)                                    | 84 |
| food                                         | 36 |
| dine; satiate                                | 21 |
| eating                                       | 20 |
| bread                                        | 19 |
| taste (v); meat; hunger;<br>live             | 9  |
| fruits; fat (adj)                            | 7  |
| vegetables; greedy;<br>table (dining; spoons | 6  |
| cook (v)                                     | 5  |



To eat continued

meal; strengthen;  
satiated; greed;  
feed; growth; health 4

hungry; fish; benefit;  
breakfast; grow; body;  
potato; man; tasteful;  
tomato; cabbage; onion 2

Id 29

Eating

food 67

drinking 45

nutrition 35

satisfy 27

hunger; beans (horse) 25

satiate 15

satiated 12

hungry; delicious 11

digestion 9

supper; apple; fat (adj) 6

life; cooking; fasting 5

living; meat; much;  
cooking pan; sweets;  
dining table;  
strengthen 4

bread; egg; water melon;  
nice; fish; stomach 2

Id 15

Engineer

physician 33

architecture; building(U);  
build 25

buildings 22

architect; expert;  
design (n); factory;  
work (n) 10

projects; decor; college;  
engineering; design(v) 8

desideratum; inventor;  
worker; agriculture 7

electricity; skilful;  
profession; contractor;  
intelligence; artist 5

student; planner;  
science; superiority; 4

mechanic; construct (v);  
manager; hotel;  
successful; progress(n);  
researcher 3

draw (v); famous;  
mind(n); brother;  
teacher 2

Id 40

Entertainment

greek seeds (Generally,  
eating greek seeds is  
a very popular habit  
especially among women) 90

chess 55

play (n) 45

leisure time; cinema 15

Entertainment continued

|                                                  |    |
|--------------------------------------------------|----|
| football                                         | 12 |
| reading                                          | 8  |
| club; friends; passing<br>time                   | 7  |
| hobby; fun                                       | 5  |
| nice; useful; fun-fair;<br>peanuts               | 4  |
| beautiful; break (n);<br>magazine; film; journey | 3  |
| busy; lido; garden;<br>joke (n); joy             | 2  |
| Id                                               | 48 |

Examination

|                        |    |
|------------------------|----|
| success                | 56 |
| fear                   | 51 |
| hard                   | 47 |
| test (n)               | 41 |
| study (n)              | 24 |
| question (n)           | 17 |
| failure                | 14 |
| end-of-the-year        | 12 |
| easy                   | 11 |
| experience (n)         | 10 |
| intelligence; dreadful | 9  |
| difficulties           | 8  |
| succeed; dread (n)     | 7  |
| answer (n); school (n) | 6  |

Examination continued

|                                                                                               |    |
|-----------------------------------------------------------------------------------------------|----|
| comparison; lesson                                                                            | 4  |
| homework; study (v);<br>fail; monthly; sit for                                                | 2  |
| Id                                                                                            | 25 |
| <u>Eye</u>                                                                                    |    |
| vision (U)                                                                                    | 45 |
| sight (U)                                                                                     | 28 |
| jewel; glasses                                                                                | 16 |
| mouth                                                                                         | 14 |
| view (n); eyelash;<br>beauty; light (n);<br>head                                              | 12 |
| nose; ear                                                                                     | 10 |
| beautiful                                                                                     | 9  |
| water (water eye in<br>Arabic means water well);<br>green (adj); blessing                     | 6  |
| large; blue (adj);<br>gazelle; binocular;<br>purity; envious;<br>black; dear; magic;<br>Allah | 4  |
| moon; yellowish-grey;<br>camel (in Arabic camel-<br>eye means walnuts);<br>brown; mirror      | 3  |
| eyeball; one-eyed;<br>scene; useful                                                           | 2  |
| Id                                                                                            | 40 |

Face

|                                               |    |
|-----------------------------------------------|----|
| beautiful                                     | 70 |
| beaming                                       | 50 |
| back (n)                                      | 25 |
| eye; beauty                                   | 15 |
| joyful; smiling (adj)                         | 10 |
| joy                                           | 8  |
| see; features; head(n);<br>moon               | 7  |
| foot; Allah; leg;<br>similarity; optimism     | 6  |
| hair; grim; life;<br>bad; mark (n)            | 5  |
| hope (n); white; man;<br>part; blackish; skin | 4  |
| scene; merry; nose;<br>moustache; wash (n)    | 3  |
| smile (n); happy; child;<br>red; cold         | 2  |
| Id                                            | 37 |

To fail

|                                         |     |
|-----------------------------------------|-----|
| succeed                                 | 165 |
| 'Yarsob' /jarsub/ =<br>synonym for fail | 20  |
| despair (n)                             | 18  |
| failure; success;<br>reform (n)         | 17  |
| play (v); despair (v);<br>examination   | 12  |
| try (v)                                 | 11  |

To fail continued

|                                                                                 |   |
|---------------------------------------------------------------------------------|---|
| encourage                                                                       | 7 |
| work (v); loose                                                                 | 6 |
| to make happy;<br>experience (n); love<br>(v); sadness; compli-<br>cated        | 5 |
| ruin (v); head (n);<br>pain; pupil; compli-<br>cate; stupid; weep;<br>study (n) | 4 |
| Id                                                                              | 9 |

Family

|                                                                                                                                                                                                                        |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 'Usrah' /usrah/ (In the<br>Arabic version of the<br>test, the stimulus word<br>'family' was trans-<br>lated into / a:ʔilah/.<br>'Usrah' is a synonym<br>of / a:ʔilah/ both in<br>classical and collo-<br>quial Arabic) | 83 |
| society (community);<br>tie (n)                                                                                                                                                                                        | 30 |
| father; happy                                                                                                                                                                                                          | 19 |
| community (C); respec-<br>table                                                                                                                                                                                        | 18 |
| big; good                                                                                                                                                                                                              | 17 |
| security (U)                                                                                                                                                                                                           | 16 |
| offspring                                                                                                                                                                                                              | 14 |
| parents                                                                                                                                                                                                                | 12 |
| mother                                                                                                                                                                                                                 | 10 |
| people; family (all<br>persons descended from<br>a common ancestor);<br>living                                                                                                                                         | 9  |

| <u>Family continued</u>                                                                                                                               |    | <u>Father</u>                                                                                                 |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------------------------------|-----|
| love (n); life; marriage;<br>brother                                                                                                                  | 7  | mother                                                                                                        | 130 |
| united; home                                                                                                                                          | 6  | kindness (U)                                                                                                  | 30  |
| rest (n)                                                                                                                                              | 4  | family                                                                                                        | 16  |
| members                                                                                                                                               | 3  | parent (father);<br>kind (adj)                                                                                | 15  |
| meeting; lonely                                                                                                                                       | 2  | responsibility                                                                                                | 8   |
| Id                                                                                                                                                    | 32 | generous; teacher;<br>love (n)                                                                                | 6   |
|                                                                                                                                                       |    | brother; bad                                                                                                  | 5   |
| <u>Farmer</u>                                                                                                                                         |    | respect (n); virtuous;<br>head (of family);<br>advice; beloved (n);<br>education; ideal (n);<br>strain; mercy | 4   |
| peasant                                                                                                                                               | 81 |                                                                                                               |     |
| field                                                                                                                                                 | 41 |                                                                                                               |     |
| grow                                                                                                                                                  | 26 | great; strong;<br>believer (religious);<br>husband; security                                                  | 3   |
| active                                                                                                                                                | 22 |                                                                                                               |     |
| agricultural reform<br>(after the 1952 revo-<br>lution 'an agricul-<br>tural reform system'<br>was adopted. Land<br>was distributed<br>among farmers) | 20 | mind (n); person; good                                                                                        | 2   |
|                                                                                                                                                       |    | Id                                                                                                            | 30  |
|                                                                                                                                                       |    | <u>To fear</u>                                                                                                |     |
| production                                                                                                                                            | 19 | coward                                                                                                        | 65  |
| striving; fertile                                                                                                                                     | 12 | cowardice                                                                                                     | 55  |
| land; greenness; worker;<br>animals; goodness;<br>feddan; vegetable                                                                                   | 9  | dread (v)                                                                                                     | 40  |
| soil                                                                                                                                                  | 7  | brave                                                                                                         | 35  |
| work (n); industrious;<br>work (v); axe                                                                                                               | 5  | Allah                                                                                                         | 30  |
| good; water (v); simple;<br>profession; country;<br>orchard                                                                                           | 3  | love (v)                                                                                                      | 10  |
|                                                                                                                                                       |    | rabbit                                                                                                        | 8   |
| goodness; fruits; desert;<br>living; food; camel                                                                                                      | 2  | tremble; evil                                                                                                 | 7   |
|                                                                                                                                                       |    | war; escape (v); mouse;<br>lion                                                                               | 6   |
| Id                                                                                                                                                    | 47 |                                                                                                               |     |

To fear continued

cry (v); beating (punish-  
ment by hitting);  
death 5

father; enemy; strong;  
darkness; weak;  
security; failure;  
devil 4

child; complex (n);  
realize; test (n);  
kind; stupid; teacher;  
respect (v); welcome  
(v); boy; embarrassed 3

Id 32

Field

plants (n) 42

peasant 41

agriculture; vegetables;  
crops 21

fruits 18

grow 17

farmer 16

green (adj); village;  
countryside 15

farm (n); greenness;  
big 11

'gheit' /ʒe:t/ (collo-  
quial synonym for  
'field') 10

animals; beautiful 9

land 7

large; buffalo; father;  
onion; wheat; cotton 5

Field continued

maize; garden; beans;  
flowers; donkey;  
plough (n) 4

water-wheels; acre;  
cattle 2

Id 29

Fish

sea 55

tialpia nilotica;  
protein: eating 25

water: delicious 21

fried: rice 19

roast: food 18

fry (v) 10

vitamins; allergy: fresh 8

big: fishing: clean (adj) 7

stockfish; livelihood;  
flour; egg 6

gills; sheatfish;  
swim (v); shrimps 4

shark; oil 3

white; sardine;  
phosphorous 2

Id 10

Flat

home 55

Flat continued

|                                                                                          |    |
|------------------------------------------------------------------------------------------|----|
| advance (n) (In Egypt,<br>sum of money paid in<br>advance to get an<br>unfurnished flat) | 35 |
| furnished                                                                                | 25 |
| residence                                                                                | 22 |
| crisis; room                                                                             | 21 |
| vacant                                                                                   | 20 |
| marriage; rent (n)                                                                       | 19 |
| villa                                                                                    | 14 |
| hope (n); impossible<br>(to find); problem                                               | 11 |
| where?; large; hut;<br>family; building                                                  | 7  |
| settlement; life                                                                         | 6  |
| key; difficulty;<br>furniture                                                            | 4  |
| car; youth; engineer;<br>kitchen; window                                                 | 2  |
| Id                                                                                       | 22 |

Flower

|                                        |    |
|----------------------------------------|----|
| rose                                   | 80 |
| beautiful                              | 51 |
| scent                                  | 27 |
| beauty                                 | 24 |
| orchard; blossomy                      | 18 |
| spring (season)                        | 17 |
| perfume; fragrance;<br>Arabian jasmine | 8  |

Flower continued

|                                                                                       |    |
|---------------------------------------------------------------------------------------|----|
| red; violet (C); pink<br>(garden plant)                                               | 5  |
| tenderness; thorn (sharp-<br>pointed growth on the<br>stem of a plant);<br>attractive | 4  |
| plant (n); tree; hope<br>(n); faithfulness                                            | 3  |
| white (adj); fruit<br>(profit, result of<br>reward); fading;<br>lotus; picnic         | 2  |
| Id                                                                                    | 40 |

Foot

|                                      |    |
|--------------------------------------|----|
| hand (n)                             | 47 |
| leg                                  | 41 |
| walk (v)                             | 36 |
| ball                                 | 30 |
| shoes                                | 22 |
| walking                              | 18 |
| body; socks; arm; man                | 6  |
| strong                               | 5  |
| playing; running                     | 4  |
| bones; short; long                   | 3  |
| dance (n); speed; step<br>(n); 30 cm | 2  |
| Id                                   | 37 |

Football

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| game                                                                              | 64 |
| basketball                                                                        | 48 |
| popular                                                                           | 38 |
| sport                                                                             | 35 |
| hobby; match (n)                                                                  | 29 |
| playground                                                                        | 25 |
| play (n)                                                                          | 19 |
| 'Ahly' /ʔahli/ (the<br>most popular football<br>team and sports-club<br>in Egypt) | 18 |
| handball; art; stadium                                                            | 12 |
| chess; ball                                                                       | 10 |
| club                                                                              | 6  |

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| 'Zamalek' /zama:lik/<br>(a popular football<br>team and sports-club<br>in Egypt)           | 4  |
| interesting; good;<br>player; tennis; speed;<br>deteriorate; like (v);<br>group- supremacy | 2  |
| Id                                                                                         | 39 |

Friend

|                                   |    |
|-----------------------------------|----|
| sincere                           | 65 |
| brother                           | 33 |
| faithful; sincerity;<br>companion | 27 |
| faithfulness                      | 20 |
| beloved                           | 19 |

Friend continued

|                                   |    |
|-----------------------------------|----|
| colleague                         | 15 |
| age (life); comrade               | 12 |
| intimate                          | 11 |
| enemy                             | 10 |
| girl-friend; neighbour            | 9  |
| bosom friend                      | 8  |
| loving (adj); generous            | 7  |
| childhood; honest;<br>cooperation | 6  |
| brotherhood; sympathy             | 5  |
| aid (n); respect (n)              | 4  |
| Id                                | 14 |

Fruit

|                     |    |
|---------------------|----|
| vegetables          | 41 |
| nice; delicious     | 36 |
| orange; apple       | 31 |
| grape               | 24 |
| water-melon         | 17 |
| banana; eating      | 15 |
| food                | 14 |
| mango; sweetness    | 12 |
| summer; juice       | 10 |
| dates               | 8  |
| fruits (figurative) | 6  |
| useful              | 5  |

Fruit continued

beauty; country; eat;  
fresh; winter 4

strawberry; peach;  
vitamins; expensive 3

sugar; garden;  
season; apricot;  
market; onion; tree 2

Id 10

Garlic

onion 144

food 33

smelly 26

smell (n); eating 22

spices; vegetable 17

cooking; /milu:xjah/ 11

/ta?lijah/ 9

bad; chilli 8

white; egg-plant;  
useful 7

meat 6

sharp (flavour);  
mortar; potatoes;  
pepper 4

heal; tomatoes; eat;  
tomato pure; grow;  
harmful; healing 2

Id 4

Generous

miser 41

of good breeding; Allah 26

guest 22

Arab (n); sincere 19

give 17

giving (adj) 16

generosity; neighbour 15

duty 14

friend 10

honour (n); good 9

sea (in Arab culture it  
is customary to say:  
as generous as the  
sea); rich; noble;  
giving (n) 7

truthful; greedy 6

believer (religious);  
man; poor; very;  
manners 5

intelligent; kind;  
peasant; amiable;  
righteous 4

Id 20

Girl

boy 126

beautiful 35

sister 21

beauty 19

love (n) 14



Girl continued

|                                                                         |    |
|-------------------------------------------------------------------------|----|
| mother; femininity                                                      | 12 |
| Miss (n)                                                                | 11 |
| manners                                                                 | 10 |
| adolescence; pleasant                                                   | 9  |
| child                                                                   | 8  |
| young-woman; educated;<br>son                                           | 6  |
| marriage; coyness;<br>tenderness; polite;<br>entertainment; young       | 5  |
| cousin; days; elegance;<br>father; heart; soft;<br>darling; intelligent | 4  |
| wife; courage; problems                                                 | 2  |
| Id                                                                      | 4  |

Golden

|                       |     |
|-----------------------|-----|
| silver (adj)          | 131 |
| shiny                 | 29  |
| gold                  | 22  |
| colour (n)            | 20  |
| jewelry; yellow       | 14  |
| hair; expensive       | 11  |
| ring (n)              | 9   |
| precious; money       | 8   |
| glittering; jeweller  | 7   |
| magnificent           | 6   |
| sun; beautiful; wheat | 5   |

Golden continued

|                                |    |
|--------------------------------|----|
| watch (n); necklet;<br>earring | 4  |
| red; bracelet                  | 3  |
| Id                             | 34 |

Government

|                                                                                                                                                          |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| justice                                                                                                                                                  | 29 |
| order (n)                                                                                                                                                | 26 |
| state (political com-<br>munity)                                                                                                                         | 24 |
| ministry; law                                                                                                                                            | 14 |
| disorder; failure;<br>administration                                                                                                                     | 9  |
| people (all the persons<br>forming a state);<br>nation; theft;<br>centralization;<br>tyrant; police;<br>parliament; despotism;<br>domination; corruption | 8  |
| usurper; presidency;<br>president; minister;<br>Egypt; organization;<br>security; activity (C);<br>society; policy;<br>progress (n); power;<br>work (n)  | 7  |
| constitution; great;<br>ill-luck; Sadat;<br>salary; National<br>Assembly; interest(n)                                                                    | 5  |
| Id                                                                                                                                                       | 38 |

| <u>Grape</u>                                               |     | <u>Green</u> continued                                                    |    |
|------------------------------------------------------------|-----|---------------------------------------------------------------------------|----|
| fruits                                                     | 105 | greenness; beautiful;<br>leaves; land; coloured;<br>garden                | 5  |
| delicious                                                  | 30  | grapes; clover; white                                                     | 4  |
| food                                                       | 36  | country; bus; hope (n)                                                    | 3  |
| summer; apple                                              | 20  | magnificent; cucumber;<br>beans; success; New<br>Year; love (n);<br>water | 2  |
| nice; sweet (adj)                                          | 15  | Id                                                                        | 45 |
| green (adj)                                                | 12  |                                                                           |    |
| water-melon; seedless                                      | 10  | <u>Grocer</u>                                                             |    |
| bunch; garden;<br>sultanas; wine                           | 8   | seller                                                                    | 69 |
| peaches; eat; banana                                       | 7   | cheese                                                                    | 44 |
| vines; useful;<br>molasses; pomegranate;<br>mango; glucose | 5   | sell                                                                      | 34 |
| expensive; drink (n);<br>dates; apricots;<br>juice         | 4   | merchant                                                                  | 33 |
| olives; plums; clover;<br>guava                            | 2   | trade                                                                     | 29 |
| Id                                                         | 45  | buying                                                                    | 24 |
|                                                            |     | fruiterer                                                                 | 17 |
| <u>Green</u>                                               |     | pulse (seeds such as<br>peas, beans, etc.)                                | 11 |
| plants                                                     | 85  | cooperative society;<br>ration (n)                                        | 10 |
| red (adj)                                                  | 50  | clever; cooperative                                                       | 8  |
| colour (n)                                                 | 40  | butter; balance (n)                                                       | 5  |
| yellow (n)                                                 | 25  | goods; sugar; soap;<br>butcher; oil; olives;<br>taxes                     | 2  |
| blue (n)                                                   | 20  | Id                                                                        | 50 |
| life; spring                                               | 12  |                                                                           |    |
| nature; peace                                              | 8   |                                                                           |    |

Guest

|                                            |    |
|--------------------------------------------|----|
| generosity                                 | 51 |
| generous                                   | 44 |
| welcome (n)                                | 35 |
| honouring; honour (v)                      | 22 |
| dear                                       | 15 |
| visit (n)                                  | 12 |
| visitor; respect (n);<br>friend; neighbour | 11 |
| treat (n); honour (n);<br>duty             | 7  |
| respectable; tea;<br>brother               | 6  |
| house; good; saloon                        | 5  |
| drink (n); stranger;<br>great; supper      | 4  |
| cook (v); welcome!                         | 2  |
| Id                                         | 37 |

Hand

|                                             |    |
|---------------------------------------------|----|
| help (n); work (n)                          | 45 |
| arm                                         | 30 |
| leg; foot                                   | 25 |
| fingers; strength                           | 20 |
| man (human being);<br>writing; long         | 10 |
| carry; shake hand (n)                       | 9  |
| acquaintance; thief;<br>ball                | 8  |
| hold; body; theft;<br>palm; blessing; Allah | 6  |

Hand continued

|                                                                                  |   |
|----------------------------------------------------------------------------------|---|
| organ; write; five;<br>big; movement; muscles;<br>production; fist;<br>watch (n) | 3 |
|----------------------------------------------------------------------------------|---|

|    |    |
|----|----|
| Id | 40 |
|----|----|

Happy

|                      |    |
|----------------------|----|
| joy                  | 62 |
| miserable            | 61 |
| glad                 | 50 |
| sad                  | 31 |
| feast; birthday      | 20 |
| luck                 | 15 |
| happiness; hope (n)  | 12 |
| very                 | 9  |
| beautiful; delighted | 8  |
| lucky                | 7  |
| youth                | 6  |
| success; day         | 5  |

|                                                                                  |   |
|----------------------------------------------------------------------------------|---|
| laugh (n); love (n);<br>celebration; family;<br>child; life; age;<br>comfortable | 4 |
|----------------------------------------------------------------------------------|---|

|                                                              |   |
|--------------------------------------------------------------|---|
| laugh (v); congratulate;<br>meeting; journey;<br>despair (n) | 2 |
|--------------------------------------------------------------|---|

|    |    |
|----|----|
| Id | 24 |
|----|----|

Hat

|     |    |
|-----|----|
| sun | 97 |
|-----|----|

Hat continued

|                                                                                                                                                                                                              |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| skull-cap                                                                                                                                                                                                    | 21 |
| pretty                                                                                                                                                                                                       | 18 |
| cover (n); hot                                                                                                                                                                                               | 17 |
| shed (n); head (n)<br>(part of body)                                                                                                                                                                         | 13 |
| rain (n); foreign                                                                                                                                                                                            | 12 |
| 'qubaṣah'<br>(the synonym of 'hat'<br>in classical Arabic);<br>'khawagah /xawagah/<br>(the name for a<br>foreigner, especially<br>from Europe, in col-<br>loquial Egyptian<br>Arabic); elegance;<br>umbrella | 11 |
| summer                                                                                                                                                                                                       | 10 |
| protection; wear (v)                                                                                                                                                                                         | 9  |
| big                                                                                                                                                                                                          | 8  |
| woman; shed (v)                                                                                                                                                                                              | 6  |
| Chicago; sea; winter;<br>helmet                                                                                                                                                                              | 4  |
| hair; child; old lady                                                                                                                                                                                        | 2  |
| Id                                                                                                                                                                                                           | 44 |

Health

|                              |    |
|------------------------------|----|
| strength; good               | 55 |
| illness                      | 30 |
| robustness                   | 17 |
| weakness; tiredness          | 15 |
| hospital                     | 10 |
| ill(n); iron(n);<br>blessing | 8  |

Health continued

|                                                                                                                                                   |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------|----|
| sport; life                                                                                                                                       | 7  |
| important; happiness                                                                                                                              | 6  |
| pain; activity (U);<br>work (n)                                                                                                                   | 5  |
| vitality; body; food;<br>non-smoking; cleanli-<br>ness; strong                                                                                    | 4  |
| mother; doctor; order (n);<br>youth; better than<br>wealth; mental                                                                                | 2  |
| Id                                                                                                                                                | 35 |
| <u>Heart</u>                                                                                                                                      |    |
| love (n)                                                                                                                                          | 56 |
| merciful                                                                                                                                          | 35 |
| life                                                                                                                                              | 25 |
| mother; man                                                                                                                                       | 17 |
| kindness                                                                                                                                          | 16 |
| mercy; affection                                                                                                                                  | 14 |
| big; white (in the<br>Egyptian culture, a<br>white-hearted person<br>means a person whose<br>heart does not know<br>hatred or evil);<br>sincerity | 12 |
| good                                                                                                                                              | 10 |
| feeling; weak;<br>sympathetic                                                                                                                     | 9  |
| body                                                                                                                                              | 8  |
| sick; father; pulse (n);<br>beat (v); mind (n)                                                                                                    | 6  |
| sciences; veins; blood;<br>soul; lion; lung                                                                                                       | 5  |

Heart continued

|                            |    |
|----------------------------|----|
| brave                      | 3  |
| dog; animal; wise;<br>pure | 2  |
| Id                         | 20 |

To help

|                                                                                                                                                                         |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| work (v)                                                                                                                                                                | 45 |
| aid (v)                                                                                                                                                                 | 20 |
| work (n); help (n)                                                                                                                                                      | 18 |
| share (v); cooperation;<br>assistant; people;<br>serve                                                                                                                  | 15 |
| mother; friend                                                                                                                                                          | 8  |
| generous; aid (n)                                                                                                                                                       | 6  |
| student; poor; hand (n);<br>respect (v); neigh-<br>bour; servant;<br>goodness                                                                                           | 5  |
| call (n); school;<br>sincere; teacher;<br>duty; Allah; peasant;<br>mercy; manager;<br>physician                                                                         | 4  |
| brother; state (poli-<br>tical community);<br>strive; father; like<br>(v); secretary; breed<br>(v); colleague;<br>patient (n); weak;<br>build; thank (v);<br>friendship | 2  |
| Id                                                                                                                                                                      | 30 |

Holiday

|                                                               |     |
|---------------------------------------------------------------|-----|
| vacation                                                      | 105 |
| comfort (n)                                                   | 37  |
| Friday (in Egypt, Friday<br>is the weekly vacation)           | 31  |
| weekly                                                        | 21  |
| official (adj); leisure<br>time                               | 19  |
| summer (n)                                                    | 17  |
| summer (adj); going out<br>(for a walk, cinema,<br>etc); nice | 15  |
| study (n); school (n);<br>play (n)                            | 9   |
| school (adj); long                                            | 7   |
| weekend; laziness;<br>journey                                 | 6   |
| enjoyment; work (n)                                           | 5   |
| transportation; yearly;<br>studying                           | 4   |
| closure; feast                                                | 2   |
| Id                                                            | 10  |

Horse

|                         |    |
|-------------------------|----|
| donkey                  | 99 |
| fast (adj)              | 44 |
| speed (n); horsemanship | 24 |
| race (n)                | 21 |
| horseman                | 19 |
| animal                  | 17 |
| Arab (adj)              | 12 |

Horse continued

|                                      |    |
|--------------------------------------|----|
| running; riding                      | 11 |
| white (adj); strength                | 8  |
| graceful; saddle                     | 6  |
| cow; strong; hobby;<br>pedigree      | 5  |
| boy-scouting; cart;<br>sincere; mare | 4  |
| tail                                 | 2  |
| Id                                   | 34 |

Hospital

|                                                                                     |     |
|-------------------------------------------------------------------------------------|-----|
| patient                                                                             | 115 |
| illness                                                                             | 30  |
| physician (doctor)                                                                  | 25  |
| cure (n); clinic                                                                    | 20  |
| large; operation;<br>university (collo-<br>cation)                                  | 12  |
| treatment; nurse                                                                    | 10  |
| medicine (substance)                                                                | 8   |
| full; care (n); free                                                                | 6   |
| mercy; injury (n);<br>nursing; chemist                                              | 5   |
| clean (adj); serve;<br>cure (v); Heliopolis<br>(the name of a<br>hospital in Cairo) | 4   |
| rest (n); rescue (n);<br>factory; building;<br>pain; home                           | 3   |
| service; club                                                                       | 2   |
| Id                                                                                  | 22  |

Hotel

|                                      |    |
|--------------------------------------|----|
| home                                 | 45 |
| sleep (n)                            | 60 |
| rest (n); tourist                    | 18 |
| comfort (n); travel (n)              | 16 |
| shelter; hotel (in<br>French)        | 14 |
| travellers                           | 10 |
| place; sleep (v);<br>night's lodging | 8  |
| Hilton; expatriation                 | 6  |
| journey; stranger;<br>lodging        | 5  |

|                                                                                                                   |    |
|-------------------------------------------------------------------------------------------------------------------|----|
| large; bed; pyramids;<br>instability; guest;<br>expensive; rent (n);<br>flat; comfortable;<br>summer; clean (adj) | 4  |
| Alexandria; luxurious                                                                                             | 3  |
| identity card; picnic                                                                                             | 2  |
| Id                                                                                                                | 32 |

House

|                                                                   |    |
|-------------------------------------------------------------------|----|
| home                                                              | 75 |
| rest (n)                                                          | 26 |
| family (all those persons<br>descended from a common<br>ancestor) | 25 |
| big                                                               | 22 |
| furniture                                                         | 20 |
| nice; lodging                                                     | 19 |
| flat                                                              | 14 |

House continued

|                                                                                              |    |
|----------------------------------------------------------------------------------------------|----|
| hut                                                                                          | 13 |
| villa; build                                                                                 | 12 |
| study (n)                                                                                    | 10 |
| nest                                                                                         | 9  |
| cement; room                                                                                 | 8  |
| street; living;<br>place; palace                                                             | 5  |
| uncle's (mother's<br>brother); organized;<br>large; shop (n);<br>clean; address;<br>calmness | 4  |
| Id                                                                                           | 25 |

Hut

|                                                                                |    |
|--------------------------------------------------------------------------------|----|
| house                                                                          | 90 |
| tent                                                                           | 31 |
| poverty; shak; wood                                                            | 18 |
| desert (n); village                                                            | 8  |
| place (n); quiet (adj);<br>dreadful; shelter;<br>straw (U)                     | 7  |
| building (C); mountain;<br>simplicity (of<br>living); room;<br>refuge; bedouin | 6  |
| hunter; peasant;<br>countryside; cave;<br>tin (U)                              | 5  |
| life; deserted; small;<br>reed (U); farm;<br>lodging; primitiveness            | 4  |
| journey; bricks;<br>comfortable                                                | 3  |
| Id                                                                             | 54 |

Ice

|                                                         |    |
|---------------------------------------------------------|----|
| water                                                   | 75 |
| refrigerator                                            | 42 |
| coldness                                                | 36 |
| summer                                                  | 29 |
| winter                                                  | 24 |
| cold (adj); white (adj);<br>snow; Europe; hot<br>(food) | 15 |
| hot (weather)                                           | 11 |
| coca-cola                                               | 10 |
| whiteness; frozen; iced                                 | 8  |
| grated                                                  | 7  |
| liquid; fire (m);<br>heating                            | 4  |
| lemon; spring (season)                                  | 3  |
| mountains; west                                         | 2  |
| Id                                                      | 20 |

Industry

|                                           |    |
|-------------------------------------------|----|
| factory                                   | 45 |
| progress (n)                              | 44 |
| trade (n)                                 | 38 |
| workers                                   | 29 |
| work (n); agriculture                     | 27 |
| production; economy                       | 19 |
| manual                                    | 11 |
| weaving; imported;<br>strong; engineering | 7  |

| <u>Industry continued</u>                                                                         |    | <u>To invent</u>                            |    |
|---------------------------------------------------------------------------------------------------|----|---------------------------------------------|----|
| sugar; modern;<br>spinning; contri-<br>vance (capacity to<br>invent); career                      | 6  | scientist                                   | 50 |
| car                                                                                               | 5  | discover                                    | 41 |
|                                                                                                   |    | think                                       | 27 |
| machine; wealth; skill;<br>maker; civilization;<br>machinery                                      | 4  | intelligent                                 | 15 |
| development; steel                                                                                | 3  | genius (C); genius (U);<br>invention        | 14 |
| cotton; wood; Japan;<br>Egyptian; useful                                                          | 2  | inventor; science;<br>design (v)            | 11 |
| Id                                                                                                | 24 | telephone; compile;<br>discoverer; machines | 9  |
|                                                                                                   |    | apparatus; research (n);<br>work (v)        | 8  |
| <u>Insect</u>                                                                                     |    | contrive; make (v);<br>computer             | 7  |
| harmful                                                                                           | 74 | ignorant; atom; surpass;<br>create          | 6  |
| fly (n)                                                                                           | 40 | progress (n); produce(v);<br>carry out      | 5  |
| cockroach                                                                                         | 29 | engineer; mind (n)                          | 4  |
| disease; harm (n)                                                                                 | 21 | Id                                          | 49 |
| worm; mosquito                                                                                    | 15 |                                             |    |
| animal; dirty                                                                                     | 12 |                                             |    |
| dirt                                                                                              | 10 | <u>Jam</u>                                  |    |
| germ                                                                                              | 9  | delicious                                   | 68 |
| summer                                                                                            | 7  | food                                        | 50 |
| tiny; hurt (n);<br>pesticide                                                                      | 6  | sweet (adj)                                 | 35 |
| big; pestilence                                                                                   | 4  | sugar (n)                                   | 20 |
| weak; bacteria;<br>butterfly; infections;<br>microscope; bugs                                     | 3  | honey                                       | 18 |
| sting(v); bees; bird;<br>disgust (v); cotton;<br>night; mouse; science;<br>snake; field; mountain | 2  | carrots; fruits                             | 15 |
|                                                                                                   |    | sweetness; eating                           | 12 |
| Id                                                                                                | 44 |                                             |    |



Jam continued

|                                                                                                                         |    |
|-------------------------------------------------------------------------------------------------------------------------|----|
| cheese; dates;<br>apricots                                                                                              | 10 |
| apple; orange                                                                                                           | 8  |
| strawberry; sandwich;<br>tins                                                                                           | 6  |
| butter; juice; roses;<br>grapes; figs;<br>chocolate; eat; rich;<br>supper (n); gateaux;<br>good; vitamins;<br>breakfast | 2  |
| Id                                                                                                                      | 35 |

Job

|                                                                                  |    |
|----------------------------------------------------------------------------------|----|
| effort                                                                           | 40 |
| industry (quality of<br>being hard-working)                                      | 20 |
| industry (branch of<br>trade or manufacture);<br>profession; tiredness           | 15 |
| tedious                                                                          | 12 |
| occupation                                                                       | 11 |
| activity (U); free;<br>eating; life;<br>engineer; grow; useful;<br>man           | 9  |
| serious; to be serious                                                           | 8  |
| like (v); exhausted<br>(used up completely);<br>dusty; woe; help(v);<br>blessing | 7  |
| foundation (U); shop(n);<br>rest (n)                                             | 6  |
| doctor; tediousness;<br>school                                                   | 5  |

Job continued

|                                                |    |
|------------------------------------------------|----|
| big; study (n);<br>laziness; striving;<br>lazy | 4  |
| reform (n); success;<br>factory                | 2  |
| Id                                             | 39 |

Joke

|                                                              |     |
|--------------------------------------------------------------|-----|
| laughter                                                     | 120 |
| good                                                         | 45  |
| riddle (n); laughable                                        | 35  |
| silly                                                        | 32  |
| jest (n)                                                     | 30  |
| nice                                                         | 22  |
| merry (n); a laugh                                           | 10  |
| a smile; pleasure                                            | 8   |
| story; interesting;<br>old; sadness;<br>happiness; amusement | 4   |
| television; song; I;<br>leisure; donkey;<br>nuisance; friend | 2   |
| Id                                                           | 15  |

Juice

|               |    |
|---------------|----|
| sugar-cane    | 65 |
| drink (n)     | 61 |
| orange; fruit | 52 |
| lemon         | 23 |

Juice continued

|                                           |    |
|-------------------------------------------|----|
| mango                                     | 15 |
| iced; strawberry                          | 12 |
| delicious                                 | 11 |
| banana                                    | 7  |
| drink (v); tomato                         | 6  |
| shop; Groppi (name of<br>a famous casino) | 5  |
| refreshments                              | 4  |
| air; digestion;<br>liquid; bitter; sweet  | 2  |
| Id                                        | 34 |

Justice

|                                             |    |
|---------------------------------------------|----|
| balance (apparatus for<br>weighing)         | 50 |
| court (place where law-<br>cases are heard) | 45 |
| government                                  | 41 |
| rights                                      | 39 |
| Allah                                       | 22 |
| law                                         | 21 |
| justice (the law and its<br>administration) | 18 |
| social                                      | 18 |
| rule (n) (government<br>or authority)       | 12 |
| judge (n)                                   | 11 |
| injustice; society;<br>case (law); peace    | 7  |
| mercy; just (adj);<br>democracy             | 6  |

Justice continued

|                                                      |    |
|------------------------------------------------------|----|
| judicial; conscience;<br>prevailing                  | 4  |
| discrimination; state<br>(n)(political);<br>security | 3  |
| destiny; freedom;<br>equality; prison                | 2  |
| Id                                                   | 25 |
| <u>King</u>                                          |    |
| president                                            | 56 |
| ruler                                                | 39 |
| Allah                                                | 31 |
| great                                                | 29 |
| Sultan                                               | 17 |
| tyrant                                               | 12 |
| throne; kingdom;<br>prince; reign (n)                | 11 |
| lion; sovereignty                                    | 10 |
| tyranny; crown (n);<br>palace                        | 9  |
| minister; just                                       | 7  |
| dominating; empire;<br>court; despotism              | 6  |
| own (v); presidency;<br>master (n)                   | 5  |
| justice (law); Morroco;<br>Saudi Arabia              | 2  |
| Id                                                   | 24 |

Knife

|                                        |    |
|----------------------------------------|----|
| cutting                                | 59 |
| sharp                                  | 56 |
| meat                                   | 25 |
| spoon                                  | 23 |
| slaughter (n); fork                    | 15 |
| kitchen; pen-knife                     | 14 |
| weapon                                 | 12 |
| butcher                                | 11 |
| blood; food                            | 9  |
| sword                                  | 8  |
| treachery                              | 7  |
| death; chopper                         | 5  |
| orange; dagger;<br>slaughter; long     | 4  |
| scissors; fear (n);<br>crime           | 3  |
| kill; cry; tool;<br>blunt (adj); bread | 2  |
| Id                                     | 56 |

Land

|               |    |
|---------------|----|
| agriculture   | 65 |
| homeland      | 39 |
| plants; space | 27 |
| farm (n)      | 25 |
| sky           | 23 |
| large         | 19 |
| field         | 16 |

Land continued

|                                                             |    |
|-------------------------------------------------------------|----|
| agricultural; Allah                                         | 15 |
| Egypt; green                                                | 12 |
| peasant; greenness;<br>countryside                          | 11 |
| peace; Sainai                                               | 9  |
| city                                                        | 8  |
| possession; barren; good;<br>desert (n)                     | 6  |
| productive; soil;<br>freedom                                | 4  |
| goodness; acre; giving;<br>construction; sand;<br>expensive | 3  |
| Id                                                          | 30 |
| <u>To laugh</u>                                             |    |
| cry (v)                                                     | 88 |
| joke (n)                                                    | 35 |
| rejoice; happy                                              | 31 |
| glad                                                        | 22 |
| joy                                                         | 18 |
| to be sad; smile (v);<br>much; laugh (n)                    | 10 |
| sad                                                         | 9  |
| comedy                                                      | 7  |
| joke (v)                                                    | 6  |
| happiness; life                                             | 5  |
| clown; hearty; success;<br>sing                             | 4  |
| play (v)                                                    | 3  |

To laugh continued

always; theatre; fun 2

Id 59

Legplant (n) (In Arabic  
it is said 'leg of  
the plant' meaning  
stem) 55

foot; walking 35

long 28

hand (n); arm 15

running; girls 12

wood; limb 8

fastness; glass; woman;  
tree; beauty; grace;  
pain; bus; branch;  
shoes; roses 5

man (human being) 3

Id 70

Life

death 181

age 21

living 19

happy; hope (n) 17

love (n); beautiful 12

better 11

pain 9

Life continued

hard 7

live; tiredness 6

good; man; long;  
respectable 5experience; marriage;  
spring; universe;  
black (adj) 4enjoyment; gloomy;  
meaningless 3

effort; society 2

Id 24

Lion

strength 66

wild beast 39

king 26

leopard 25

animal; ferocious 16

brave 21

bravery; rabbit; strong 19

savageness 15

coward 11

savage; beast of prey 9

woods; horror; cub;  
bear (n) 6

fear (n); roar (v) 5

cat; terrible 4

wolf; dog; prey (n) 3

Lion continued

donkey; hungry;  
cowardice; elephant;  
meat; monkey;  
dareness

2

Id

10

Liver

meat

58

heart

29

man

27

food

25

whale

21

sick; kidney

18

eating; body; organ

17

animal; disease

14

stomach

12

active

11

blood

10

diabetes

9

chicken

8

iron (n); butcher

7

pain; useful; anatomy;  
sheep; system

5

surgery; red (adj)

4

mouth; cow

3

seller; vitamins;  
donkey

2

Id

24

Long

short

240

staple; upright

15

patience

12

night

10

palms

7

tower

6

giraffe; happy

5

road; man; hair;  
street; active; great;  
arm; beautiful

4

post

2

Id

34

Man

woman

178

strength

36

great

21

strong; youth

18

young-woman

17

father; brave

12

bravery

10

marriage

8

respect

7

boy

6

work (n)

5

personality; old;  
space(man)

4

Id

23

Market

|                                                                                                     |    |
|-----------------------------------------------------------------------------------------------------|----|
| vegetable (In Egypt there are some vegetable-markets in which vegetables and fruit are mainly sold) | 79 |
| purchase (n)                                                                                        | 38 |
| selling                                                                                             | 27 |
| crowds; sell; crowded; seller                                                                       | 15 |
| trade (n)                                                                                           | 10 |
| buy (v)                                                                                             | 7  |
| noise; shop (n)                                                                                     | 6  |
| purchases (n); buyer; eating                                                                        | 5  |
| money; goods; work (n); people; cattle; fish; fruit; Monday (market)                                | 4  |
| large; thief                                                                                        | 3  |
| donkey; Cleopatra (market in Alexandria)                                                            | 2  |
| Id                                                                                                  | 54 |

Marriage

|                                                                     |    |
|---------------------------------------------------------------------|----|
| divorce (n)                                                         | 40 |
| love (n); tie (n)                                                   | 20 |
| life; offspring                                                     | 15 |
| responsibility; family; cooperation; settlement (making one's home) | 14 |
| agreement; happy; sharing                                           | 10 |

Marriage continued

|                                                     |    |
|-----------------------------------------------------|----|
| mother; necessary; enjoyment; woman; wife; bachelor | 8  |
| marry; celebration; good; home                      | 7  |
| bride; parents                                      | 4  |
| party; unity; gateaux                               | 2  |
| Id                                                  | 34 |

Meat

|                                                                                                                                                                                                                                                                 |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| food                                                                                                                                                                                                                                                            | 53 |
| eating                                                                                                                                                                                                                                                          | 40 |
| cow                                                                                                                                                                                                                                                             | 28 |
| 'foul' /fu:l/ (= horse-beans. It is the most popular food in Egypt. Plenty of water is added to beans and then boiled until they become soft. To be ready for eating oil, salt, and lemon or fat and salt are added. Sometimes it is cooked with tomato sauce.) | 24 |
| protein                                                                                                                                                                                                                                                         | 18 |
| animal                                                                                                                                                                                                                                                          | 15 |
| queue                                                                                                                                                                                                                                                           | 12 |
| nutritious; cooperative society (state-owned); expensive; useful                                                                                                                                                                                                | 9  |
| chicken; fish; red (adj); delicious; nice; buffalo                                                                                                                                                                                                              | 8  |

Meat continued

rare; health; season  
(period closely  
related with some-  
thing. In Egypt,  
meat is usually  
eaten in large quan-  
tities during reli-  
gious festivals and  
feasts. It is a  
social habit rather  
than religious.) . 7

eat; fat; steak 6

bones; banquet; lean  
(adj); blood; rabbit;  
cheese; milk; sheep;  
cooking; fresh 4

Id 22

Milk

cow 59

white (adj) 40

cheese; butter 21

nutritious; adulterated 28

yoghourt 19

food; tea 14

'haleeb /hali:b/  
(synonym: collo-  
quial and classical) 12

morning; useful 11

protein; bones 9

child 7

health 6

drink (n); expensive;  
egg; vitamins 5

Milk continued

glass (vessel); coffee;  
seller; cat 4

Id 21

Mind

thinking 91

thinker 49

electronic (electronic  
mind = computer) 47

thought; intelligence 31

intelligent (adj) 18

brain 26

think 11

chess; man; genius (n);  
(capacity) 7

deliberation; broad;  
inventor 6

wisdom 5

sound (adj); head (n);  
mad; memory; stupid 4

Id 12

Money

big 44

'flous' /flu:s/ (the  
colloquial synonym  
for money) 39

capital 34

richness; wealth 20

Money continued

|                                                                                                                           |    |
|---------------------------------------------------------------------------------------------------------------------------|----|
| 'halal' /hala:l/<br>(non-taboo)                                                                                           | 19 |
| work                                                                                                                      | 17 |
| bankruptcy                                                                                                                | 14 |
| buying; poverty                                                                                                           | 12 |
| necessary; rich                                                                                                           | 9  |
| happiness; expenses;<br>life; pocket-money;<br>spend                                                                      | 8  |
| goodness                                                                                                                  | 7  |
| forged                                                                                                                    | 6  |
| chocolate                                                                                                                 | 5  |
| pound (note); less;<br>luxury; blessing;<br>charity; livelihood;<br>piasters; wallet;<br>gold; trade (n)                  | 4  |
| important; greed;<br>material (n); enjoy-<br>ment; car; effort;<br>projects; capabilities;<br>child; miserliness;<br>bank | 2  |
| Id                                                                                                                        | 29 |

Month

|                                                               |     |
|---------------------------------------------------------------|-----|
| year                                                          | 109 |
| day (C)                                                       | 98  |
| week                                                          | 29  |
| honey (a collocation<br>with month which means:<br>honeymoon) | 15  |

Month continued

|                                                                                                                       |    |
|-----------------------------------------------------------------------------------------------------------------------|----|
| long; Ramadan (the<br>month during which<br>Moslems fast from<br>sunrise to sunset)                                   | 12 |
| vacation; salary;<br>October                                                                                          | 8  |
| period                                                                                                                | 3  |
| February; March; April;<br>November; Arabic (an<br>Arabic month means a<br>month in the Hegri or<br>Islamic calendar) | 2  |
| Id                                                                                                                    | 44 |

Moon

|                                                                                                        |    |
|--------------------------------------------------------------------------------------------------------|----|
| sun                                                                                                    | 85 |
| night                                                                                                  | 59 |
| light (Un)                                                                                             | 56 |
| bright (adj); stars                                                                                    | 18 |
| sky                                                                                                    | 7  |
| artificial (artificial<br>moon in Arabic means<br>sputnik); space                                      | 6  |
| love (n)                                                                                               | 5  |
| beautiful; Allah (the<br>name of God among<br>Moslems); beauty;<br>girl; morning                       | 3  |
| white; earth; darkness;<br>full moon; romance (n);<br>poetry; quiet (n);<br>month; sciences;<br>planet | 2  |
| Id                                                                                                     | 18 |



Morning

|                                                               |    |
|---------------------------------------------------------------|----|
| night (U)                                                     | 60 |
| evening                                                       | 40 |
| day (U)                                                       | 30 |
| noon                                                          | 20 |
| sunrise; work (n)                                             | 19 |
| sun                                                           | 15 |
| wake up                                                       | 10 |
| dawn; light (n); good<br>morning; vitality;<br>dew; breakfast | 8  |
| beans; sparrow;<br>beginning; prayers;<br>nice; sunset        | 5  |
| goodness; beauty; moon                                        | 4  |
| hope (n); magnificent;<br>short; new; breeze                  | 3  |
| white; thinking; air;<br>sunny                                | 2  |
| Id                                                            | 29 |

Mother

|                                                                                   |     |
|-----------------------------------------------------------------------------------|-----|
| father                                                                            | 110 |
| kindness                                                                          | 100 |
| kind; sacrifice (n)                                                               | 10  |
| love (n); responsibility;<br>ideal (n)                                            | 8   |
| good; tender; breeder                                                             | 7   |
| heart; garden; family                                                             | 6   |
| pregnant; parent; faith-<br>fulness; breast fee-<br>ding; housewife;<br>world (n) | 4   |

Mother continued

|                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------|----|
| girl; grandmother;<br>child; care (n);<br>house; great; clever;<br>dear; excellent; son;<br>motherhood; school     | 2  |
| Id                                                                                                                 | 20 |
| <u>Mouth</u>                                                                                                       |    |
| teeth                                                                                                              | 42 |
| eating                                                                                                             | 52 |
| nose                                                                                                               | 26 |
| food                                                                                                               | 20 |
| speech                                                                                                             | 18 |
| speak                                                                                                              | 12 |
| eat                                                                                                                | 11 |
| small; taste (n)                                                                                                   | 8  |
| open (adj); eye                                                                                                    | 6  |
| heart; doctor; idle-talk                                                                                           | 5  |
| clean (adj); kiss (n);<br>man; dog; hand                                                                           | 4  |
| face; cleanliness;<br>large; voice                                                                                 | 3  |
| part (n); organ; hunger;<br>ear; swallowing;<br>throat; horn (wind<br>instrument); smiling;<br>illness; shut (adj) | 2  |
| Id                                                                                                                 | 32 |

Museum

|                                              |     |
|----------------------------------------------|-----|
| monuments                                    | 110 |
| antiques                                     | 26  |
| statues                                      | 18  |
| wax (museum)                                 | 12  |
| visitors; exhibition;<br>history             | 10  |
| Pharaoh; information;<br>pyramids            | 8   |
| heritage                                     | 6   |
| see; place; rare;<br>photos                  | 5   |
| civilization; agricul-<br>tural              | 4   |
| fish (n); science; Roman;<br>sphinx; temples | 3   |
| ancient; show (n)                            | 2   |
| Id                                           | 30  |

Music

|                                                                                         |    |
|-----------------------------------------------------------------------------------------|----|
| quiet (adj)                                                                             | 45 |
| tunes                                                                                   | 29 |
| comfort (n)                                                                             | 25 |
| quiet (n)                                                                               | 20 |
| singing                                                                                 | 18 |
| beautiful                                                                               | 16 |
| wonderful; enjoyable; art                                                               | 15 |
| dance (n)                                                                               | 12 |
| Abdul-Wahab (the most<br>popular singer and<br>composer in Egypt and<br>the Arab world) | 10 |

Music continued

|                                                                                                           |    |
|-----------------------------------------------------------------------------------------------------------|----|
| Abdul-Halim (was the<br>most popular singer<br>after Abdul-Wahab);<br>Shadia (a popular<br>female-singer) | 9  |
| radio; comfortable;<br>relaxation; song                                                                   | 8  |
| piano; symphony; eastern                                                                                  | 7  |
| sad; listening                                                                                            | 6  |
| singer; love (n); beauty;<br>instrument; melodies                                                         | 5  |
| hearts; angels; hobby;<br>playing; sentiment                                                              | 4  |
| player; drum; Beethoven                                                                                   | 3  |
| Id                                                                                                        | 36 |

Neighbour

|                                    |    |
|------------------------------------|----|
| friend                             | 76 |
| sincere                            | 33 |
| brother                            | 31 |
| colleague; beloved                 | 19 |
| companion                          | 15 |
| faithful; generous                 | 14 |
| good                               | 12 |
| long company; love (n)             | 11 |
| relative                           | 10 |
| help (n); dear                     | 9  |
| succour (n); helper;<br>friendship | 8  |
| rescuer; loving;<br>brotherhood    | 7  |

Neighbour continued

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| home; kind; peace                                                           | 6  |
| service; treatment;<br>cooperation; of true<br>origin; honest               | 4  |
| full-brother; hope (n);<br>next; respect;<br>affection; intimacy;<br>polite | 2  |
| Id                                                                          | 47 |

Newspaper

|                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------|----|
| Al-akhbar /?al?axba:r/<br>(a daily Egyptian<br>newspaper)                                                          | 45 |
| news                                                                                                               | 42 |
| Al-Ahram /?al?ahra:m/<br>(a daily Egyptian<br>paper)                                                               | 35 |
| magazine                                                                                                           | 34 |
| paper (news)                                                                                                       | 24 |
| morning (n); reading;<br>culture                                                                                   | 21 |
| press (n)                                                                                                          | 15 |
| daily; politics; weekly                                                                                            | 12 |
| information; morning<br>(adj)                                                                                      | 11 |
| Al-Gamhouria<br>(a daily Egyptian<br>paper)                                                                        | 11 |
| 'gornal' /gorna:l/<br>(colloquial name for<br>newspaper. It is the<br>Arabicised pronuncia-<br>tion of 'journal'.) | 10 |

Newspaper continued

|                                                                                              |   |
|----------------------------------------------------------------------------------------------|---|
| knowledge; information                                                                       | 7 |
| Friday; reader; read                                                                         | 5 |
| amusement; today's;<br>broadcast (n);<br>Al-Ahaly /?al?ahali/<br>(a local paper in<br>Tanta) | 4 |
| Id                                                                                           | 3 |

Night

|                                          |     |
|------------------------------------------|-----|
| day (U)                                  | 111 |
| darkness                                 | 55  |
| morning                                  | 15  |
| quiet (n); moon; long                    | 14  |
| sleep; still (n);<br>sleeping            | 12  |
| quiet (adj); lovers                      | 9   |
| comfort                                  | 8   |
| dread (n); stars;<br>fear (n)            | 7   |
| beautiful                                | 5   |
| vigil; romance;<br>mysterious; dark      | 4   |
| weeping; gloominess;<br>love (n); friend | 3   |
| white; sky                               | 2   |
| Id                                       | 42  |

Nurse

|                                                                                                            |    |
|------------------------------------------------------------------------------------------------------------|----|
| physician (doctor)                                                                                         | 74 |
| hospital                                                                                                   | 48 |
| mercy                                                                                                      | 26 |
| angel; care(n)                                                                                             | 25 |
| disease; kind                                                                                              | 15 |
| help (n)                                                                                                   | 11 |
| ill (n); activity (U);<br>treatment; medicine<br>(substance, especially<br>one taken through the<br>mouth) | 10 |
| cure (n); pain                                                                                             | 8  |
| comforter (person);<br>kindness                                                                            | 6  |
| help (v); active;<br>treat (v); great;<br>injection                                                        | 5  |
| tiredness; white; clinic                                                                                   | 3  |
| Id                                                                                                         | 33 |

Onion

|                       |    |
|-----------------------|----|
| garlic                | 90 |
| tears                 | 25 |
| eating; vegetables    | 22 |
| smell; green          | 20 |
| food; cooking         | 15 |
| plant (n); molasses   | 10 |
| grow (v); useful; bad | 8  |

Onion continued

|                                                                                                                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| chilli; lentils; spices;<br>/ta?lijah/ (grated<br>onions and garlic fried<br>in fat or oil in pre-<br>paration for cooking<br>vegetables. Vegetables,<br>tomato sauce and spices<br>are added to this<br>mixture.) | 7  |
| beans; eat                                                                                                                                                                                                         | 6  |
| eyes; tomato; sauce                                                                                                                                                                                                | 5  |
| village; heavy; heat (n);<br>red (adj); Egyptian                                                                                                                                                                   | 2  |
| Id                                                                                                                                                                                                                 | 31 |
| <u>Pain</u>                                                                                                                                                                                                        |    |
| illness (U)                                                                                                                                                                                                        | 96 |
| tiredness                                                                                                                                                                                                          | 53 |
| agony                                                                                                                                                                                                              | 38 |
| ill (n); strong                                                                                                                                                                                                    | 19 |
| rest (n); patience                                                                                                                                                                                                 | 14 |
| torture (n); awful                                                                                                                                                                                                 | 10 |
| headache; troubles                                                                                                                                                                                                 | 6  |
| weakness; feel                                                                                                                                                                                                     | 5  |
| nasty; sadness; doctor;<br>cure (n)                                                                                                                                                                                | 4  |
| head; life; endemic                                                                                                                                                                                                | 3  |
| colic (n); bad                                                                                                                                                                                                     | 2  |
| Id                                                                                                                                                                                                                 | 40 |

Peace

|                                                                                                          |     |
|----------------------------------------------------------------------------------------------------------|-----|
| war                                                                                                      | 120 |
| security                                                                                                 | 35  |
| Sadat; love (n)                                                                                          | 30  |
| pigeons                                                                                                  | 20  |
| justice; reassurance                                                                                     | 15  |
| just (adj)                                                                                               | 10  |
| Egypt                                                                                                    | 9   |
| goodness; desideratum;<br>desire (n); luxury;<br>reconciliation;<br>happiness; Middle East;<br>Palestine | 4   |
| world; Arabs                                                                                             | 3   |
| wise; Israel; fear (n)                                                                                   | 2   |
| Id                                                                                                       | 42  |

Peach

|                           |     |
|---------------------------|-----|
| fruit                     | 120 |
| delicious; eating         | 21  |
| red (adj)                 | 29  |
| food                      | 18  |
| nice; summer              | 17  |
| orange; grapes            | 15  |
| jam; dates                | 11  |
| sweet                     | 9   |
| mango; plums; water-melon | 6   |
| apricots                  | 4   |

Peach continued

|                                                                                                         |    |
|---------------------------------------------------------------------------------------------------------|----|
| carrots; plant (n);<br>seeds; tree; round;<br>eat; cucumber; stone<br>(n); seller; hard;<br>pomegranate | 2  |
| Id                                                                                                      | 15 |

People

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| society                                                                                    | 83 |
| many                                                                                       | 34 |
| citizens; crowds                                                                           | 24 |
| peoples                                                                                    | 23 |
| community                                                                                  | 18 |
| beasts                                                                                     | 17 |
| nation                                                                                     | 15 |
| brethren                                                                                   | 12 |
| country; life                                                                              | 8  |
| animal; market                                                                             | 7  |
| corporation; generosity                                                                    | 5  |
| world (n); cattle                                                                          | 4  |
| work (n); goodness;<br>individuals; queues                                                 | 3  |
| good; sincerity; family;<br>city; friendship;<br>party; love (n);<br>street; living; noise | 2  |
| Id                                                                                         | 45 |

| <u>Pig</u>                                                             |     | <u>To play</u> continued                                                         |    |
|------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------|----|
| taboo                                                                  | 115 | sit                                                                              | 6  |
| animal                                                                 | 50  | exhausted; club; chess;<br>exult                                                 | 5  |
| dirty; meat                                                            | 25  | laugh (v); study (v);<br>amusement; sleep                                        | 4  |
| dirt; stupid                                                           | 15  | relax; cry (v); eat                                                              | 2  |
| harm (n); bad; ugly                                                    | 10  | Id                                                                               | 24 |
| harmful; Europe                                                        | 8   |                                                                                  |    |
| food; hated                                                            | 6   |                                                                                  |    |
| dog; stinking;<br>fool (n)                                             | 4   | <u>Policeman</u>                                                                 |    |
| horse; butcher; ox;<br>cow; fat; camel;<br>rotten; disease;<br>disgust | 2   | security                                                                         | 72 |
| Id                                                                     | 32  | safety                                                                           | 30 |
|                                                                        |     | thief                                                                            | 24 |
|                                                                        |     | order (n)                                                                        | 21 |
|                                                                        |     | justice                                                                          | 15 |
| <u>To play</u>                                                         |     | protection; officer                                                              | 14 |
| ball                                                                   | 95  | guard (n); cop                                                                   | 12 |
| football                                                               | 27  | theft                                                                            | 10 |
| run; pass time; child                                                  | 26  | assistant; law;<br>security man                                                  | 7  |
| rejoice                                                                | 24  | brave; serve; traffic;<br>cheat (n)                                              | 6  |
| sports                                                                 | 17  | honest; courage; chief<br>prosecutor; governor;<br>succour                       | 5  |
| handball                                                               | 15  | guard (U); strong;<br>arrest (v); service;<br>accident; organize;<br>court (law) | 4  |
| active                                                                 | 12  | good; industrious;<br>general (rank); army;<br>salute; police car                | 2  |
| game                                                                   | 11  | Id                                                                               | 43 |
| childhood; forget                                                      | 10  |                                                                                  |    |
| playground                                                             | 8   |                                                                                  |    |
| merry (n); jest (v);<br>amuse himself                                  | 7   |                                                                                  |    |

Polite

|                                         |    |
|-----------------------------------------|----|
| refined                                 | 49 |
| respectable                             | 40 |
| manners                                 | 30 |
| active                                  | 19 |
| sincere                                 | 17 |
| education; generous                     | 15 |
| friend                                  | 10 |
| intelligent                             | 9  |
| very; sound (adj);<br>obedient          | 8  |
| brave; diplomacy;<br>serious            | 7  |
| good; fit (adj);<br>sedate; quiet       | 6  |
| nice; brother; pleasant;<br>respect (n) | 5  |
| joyful; evil; wise;<br>successful       | 4  |
| Id                                      | 54 |

Potato

|              |    |
|--------------|----|
| eating       | 69 |
| starch (n)   | 51 |
| tomato       | 31 |
| sweet-potato | 25 |
| fried; food  | 15 |
| cooking      | 14 |

Potato continued

|                                                                                                                                                      |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 'Meloukhya' /milu:xijah/<br>(a very popular vegetable similar in appearance to mint plant. The leaves are chopped into a fine stuff and then cooked) | 10 |
| vegetable; delicious                                                                                                                                 | 8  |
| eat; nice                                                                                                                                            | 7  |
| useful; knife (n)                                                                                                                                    | 4  |
| boiled; beans                                                                                                                                        | 3  |
| forbidden; cabbage;<br>cooked; nutrition;<br>market (n)                                                                                              | 2  |
| Id                                                                                                                                                   | 30 |

To pray

|                                                                                                           |    |
|-----------------------------------------------------------------------------------------------------------|----|
| to devote oneself to<br>worship                                                                           | 45 |
| Allah                                                                                                     | 41 |
| mosque                                                                                                    | 40 |
| fast (v)                                                                                                  | 19 |
| prostrate (to kneel down with face to the ground to show submission and deep respect to Allah in prayers) | 19 |
| bow (bend the body to show submission to Allah in prayers)                                                | 15 |
| believer (religious);<br>faith (n)                                                                        | 15 |
| invoke (to call upon Allah for goodness, help, etc.)                                                      | 12 |

To pray continued

worship (n); Friday (an  
important prayer per-  
formed on Friday noon  
collectively in  
mosques); Moslem 11

feast (n) (a prayer  
performed collec-  
tively on the first  
day of the feast);  
church 9

thank; dawn (prayer);  
Godhead; believe;  
Ka?bah /Ka?bah/ 8

haj (pilgrimage);  
invocation (prayers);  
ordinances (religious) 7

prayer-rug; paradise 6

morning (prayer);  
submissiveness;  
respect (v);  
religiousness 5

Id 18

Problem

solution 91

population (adj) 31

complicated; complex (n) 21

crisis 16

difficult; social;  
solve 12

economic 11

Palestine 10

political 9

food 7

Problem continued

concord; family;  
torture (n); war;  
society; thinking 4

world; Middle East;  
east; humanity 3

big; life; thought;  
impossibility; crowd  
(n); state (political);  
quarrel; treatment;  
despair (n);  
dangerous 2

Id 69

To punish

forgive 33

chastise 31

father; guilt; breed (v) 21

reform (v) 20

Allah 18

blame 17

guilty; educate 12

harm (v); penalty;  
wrong (n) 11

revenge 8

criminal; deprive (v);  
shake hands 7

prison; justice;  
reward (v) 6

to make mistake; wrong  
(adj); negligent; bad 4

Id 24



Pyjama

|                                            |     |
|--------------------------------------------|-----|
| sleep (n)                                  | 120 |
| clothing (U)                               | 45  |
| trousers; home; suit;<br>'Galabeya'        | 20  |
| wear (v); robe                             | 15  |
| winter; warmth                             | 10  |
| shirt                                      | 8   |
| boy; large; night                          | 6   |
| cotton; man                                | 5   |
| half-sleeve; long;<br>dress (n); red (adj) | 4   |
| short                                      | 3   |
| comfort (n); tailor;<br>useful             | 2   |
| Id                                         | 11  |

Rabbit

|                                                                    |    |
|--------------------------------------------------------------------|----|
| animal                                                             | 78 |
| clover                                                             | 18 |
| chicken; 'Meloukhia'<br>/milu:xjah/                                | 15 |
| speed                                                              | 14 |
| cowardly; white;<br>poultry                                        | 10 |
| cat; meat                                                          | 8  |
| jump (v); coney (skin)                                             | 7  |
| pen (enclosure); duck                                              | 6  |
| farm; big; pet;<br>raise (breed); mouse;<br>run; eating; land; fox | 4  |
| desert (Sahara); buffalo;<br>lion; pigeon                          | 2  |
| Id                                                                 | 68 |

Question

|                                                         |     |
|---------------------------------------------------------|-----|
| answer (n)                                              | 250 |
| enquiry                                                 | 20  |
| difficult                                               | 12  |
| strange; understanding                                  | 10  |
| easy; examination;<br>intelligence                      | 8   |
| teacher; lesson                                         | 6   |
| awkward; test (n)                                       | 4   |
| thinking; knowledge;<br>fear (n); success;<br>classroom | 2   |
| Id                                                      | 33  |

Radio

|                                             |    |
|---------------------------------------------|----|
| television                                  | 55 |
| songs; news                                 | 25 |
| listening                                   | 28 |
| broadcast (n); tran-<br>sistor; information | 20 |
| amusement                                   | 18 |
| interesting; listen                         | 15 |
| recording                                   | 12 |
| electricity; programme;<br>broadcaster      | 10 |
| the world; music                            | 8  |

Radio continued

culture; cassette  
recorder; sound (n);  
telephone; Middle  
East (station) 6

noise; radar; friend;  
politics; expensive;  
play (drama) 4

ear; hobby; people;  
talk (v); invention 2

Id 20

Rain

winter 85

water 55

heavy 42

goodness 20

cold (n) 16

plant (n); mud 15

umbrella; sky; cloud;  
thunder; blessing 10

sun; heaviness; life 8

chaos; flow (n) 5

fog; Allah; winds 4

hot; delay (U) 3

cyclone; summer;  
mercy; hardships 2

Id 30

To read

write 78

To read continued

book 60

newspaper; story 20

culture; culturing 18

knowledge 17

learn; think 15

thinking 10

study (v); benefit (v) 7

play (v); succeed; know 5

sleep; look through;  
understand; magazine;  
engross 4

hear 3

wear 2

Id 38

Red

colour (n) 52

green (adj) 42

blood 35

blue (n) 19

yellow (n); white (n) 15

'Al-ahly' (a football  
team whose players  
wear red T-shirts) 13

black 10

tomato; lips 9

beautiful 8

roses; glow (n) 6

Red continued

devils (red devils are the  
members of Al-ahly  
football team);  
fire (n); danger;  
dress (n) 4

book; blouse; light (C);  
trousers; water-melon;  
apple; apricots;  
cheeks; mouth; tongue 3

Id 62

To remember

forget 101

think 74

memories; lessons 20

Allah 19

mind; memory (capacity) 17

man 9

to pay one's attention 8

recall (v) 7

intelligence; regret (v);  
study (v); past 5

days; friends; agony;  
woe; lose; examination;  
thought 4

question; play (v) 3

duties; work (n); know;  
repeat 2

Id 32

To rent

flat 131

house 24

sell; let (v) 22

car; buy 20

rent (n) 17

take (v) 14

possess 12

borrow; land; taxi 11

shop 9

live 7

bicycle 5

pay (v) 4

owner; peasant 2

Id 30

To respect

polite 82

appreciate (put a high  
value on); parents 30

politeness 26

father 19

teacher 15

like (v) 14

scorn (v) 12

manners; work (n) 11

mother; impolite 10

To respect continued

honour (n); virtue (n)  
 (any particular kind  
 of goodness or excel-  
 lence); judge (n) 8

keep; to go away;  
 manager; fear (v); man;  
 disregard 5

Id 39

To ride

car 59

get off 57

bus 45

walk (v) 24

horse 18

get in; transport 15

donkey 14

train; transportation 9

taxi; aeroplane 8

enter; arrive 6

go; run; sit; ship (n);  
 jump (v) 4

speed; bicycle; crowd  
 (n); goodbye; hard-  
 ship; drive (v) 3

go out; carpet; metro;  
 travel (n) 2

Id 27

River

sea 85

water (n) 79

Nile 58

life 25

flood (n); long 15

lake; sweet (water);  
 ocean; course; good-  
 ness; boats 7

blessing 6

fertilize; blue 4

run (v) 3

Id 35

Room

sleep (n) (in collo-  
 cation with room means  
 bedroom) 40

home 35

large 24

study (n) 20

house 15

flat; living; sitting 12

furniture; rest (n) 10

hall; saloon 8

square; chair; bed;  
 building (U) 5

classroom 4

| <u>Room continued</u>                                                                                                   |    | <u>Sailor</u>                            |     |
|-------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------|-----|
| sleep (v); light (n);<br>temple; place; bath-<br>room; relaxation;<br>writing-room;<br>inhabitants; shelter             | 3  | ship (n)                                 | 101 |
|                                                                                                                         |    | sea                                      | 31  |
|                                                                                                                         |    | ocean; navy                              | 29  |
| warmth; quiet (n);<br>closed; street;<br>vacant; tent; freedom;<br>prison                                               | 2  | swimmer                                  | 17  |
|                                                                                                                         |    | diver; clever                            | 15  |
| Id                                                                                                                      | 67 | pilot; rivers                            | 12  |
|                                                                                                                         |    | sail (v); boat                           | 11  |
|                                                                                                                         |    | fish; captain; swim                      | 9   |
| <u>Round</u>                                                                                                            |    | water (n); voyage                        | 7   |
| ball                                                                                                                    | 81 | fishing; waves                           | 6   |
| circle (n)                                                                                                              | 55 | courage; death                           | 4   |
| table                                                                                                                   | 19 | cross (v)                                | 2   |
| rectangular                                                                                                             | 14 | Id                                       | 44  |
| square; circular                                                                                                        | 12 |                                          |     |
| earth; flat                                                                                                             | 10 | <u>Saleswoman</u>                        |     |
| geometrical; moon                                                                                                       | 8  | buyer (feminine);<br>purchases (n)       | 30  |
| flat (adj); straight                                                                                                    | 6  | buyer (masculine);<br>salesman           | 18  |
| watch (n); egg; face<br>(n); figure (n); sun;<br>ring (n); oval;<br>cylinder                                            | 4  | buy (v); profit (n);<br>market (n); sell | 15  |
| can (n); head (n);<br>water-melon; orange<br>(n); tomato; square;<br>wheel; semi-circular;<br>space; mirror;<br>scenery | 2  | bread; work (v);<br>vegetable            | 12  |
|                                                                                                                         |    | newspapers; worker<br>(feminine)         | 9   |
| Id                                                                                                                      | 54 | grocery; food; money;<br>vendor          | 8   |
|                                                                                                                         |    | striving; livelihood                     | 6   |

Saleswoman continued

struggle (n); misery;  
trade (n); poor;  
selling 4

place (n); clothes;  
polite; thief; loser;  
lady 3

poverty; hard-worker;  
countryside; sincere;  
sweets; egg; intelli-  
gent; roses; orange;  
honour (n); peasant;  
good; beautiful 2

Id 35

Scale

justice 120

sensitive; weight 25

pans; weight; market 20

balance (n); right  
(something to which  
one has a just claim) 15

purchase (n) 10

laboratory; just 8

greengrocer; kilo;  
vegetables 6

goods; selling; flour;  
balanced 5

chemistry; fruit;  
criterion; gold 4

spring (device); new;  
meat; Doomsday; food;  
life 2

Id 27

School

instruction 98

science 65

university 20

college; teacher; study  
(n); pupils 15

classroom 12

house; secondary 10

nation; preparatory 8

military 6

mother (In Arabic, there  
is a very popular  
poem beginning:  
Mother is a school.);  
library; mosque;  
culture 5

weapon; failure; edu-  
cation; hospital;  
model 4

blackboard; playground;  
order (n); adminis-  
tration 3

important; civilization;  
church 2

Id 15

Science

physics 51

chemistry 37

culture; literature 28

subjects (school) 23

study (n) 19

Science continued

|                                                                                                     |    |
|-----------------------------------------------------------------------------------------------------|----|
| mathematics; progress;<br>research (n)                                                              | 17 |
| useful                                                                                              | 15 |
| history                                                                                             | 8  |
| arts; intelligence;<br>school                                                                       | 6  |
| laboratory; experiment<br>(n); religious                                                            | 5  |
| memorization; modern;<br>health; hygiene                                                            | 4  |
| scientist; biology;<br>scientific; college                                                          | 3  |
| experience (n);<br>studying; success;<br>complex; news;<br>astronomy; exami-<br>nation; discoveries | 2  |
| Id                                                                                                  | 21 |

To see off

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| leave (U)                                                                         | 41 |
| receive; traveller                                                                | 32 |
| travel (n); welcome (v);<br>sadness                                               | 12 |
| leave (v); travel(v);<br>shake hand (v)                                           | 20 |
| beloved; leave (go<br>away from); tears                                           | 8  |
| depart; hesitate                                                                  | 16 |
| wave (v); airport;<br>friend; death;<br>seeing off; sending<br>regards to; sadden | 4  |

To see off continued

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| train (n); meeting;<br>tourist; compassion;<br>money; end (n);<br>kiss (v) | 3  |
| Id                                                                         | 48 |

To sell

|                                                                                                              |     |
|--------------------------------------------------------------------------------------------------------------|-----|
| buy (v)                                                                                                      | 145 |
| trade (n)                                                                                                    | 32  |
| merchant; profit (n)<br>(money gained in<br>business); market (n);<br>purchase (n); trade<br>(v); profit (v) | 14  |
| clever                                                                                                       | 10  |
| goods; work (n)                                                                                              | 9   |
| give; seller                                                                                                 | 8   |
| honour (n); greengrocer;<br>clothes; export (n);<br>exchange (v)                                             | 6   |

|                                                                          |   |
|--------------------------------------------------------------------------|---|
| 'Al-mouski' /?almuski/<br>(the most popular high<br>street in Old Cairo) | 5 |
|--------------------------------------------------------------------------|---|

|    |    |
|----|----|
| Id | 32 |
|----|----|

Servant

|              |    |
|--------------|----|
| assistant    | 36 |
| master       | 25 |
| serve        | 21 |
| maid         | 20 |
| slave; house | 17 |

Servant continued

|                                                   |    |
|---------------------------------------------------|----|
| obedient                                          | 14 |
| work (v); work (n);<br>palace                     | 12 |
| kitchen                                           | 11 |
| poor (deserving help<br>and sympathy)             | 10 |
| humiliation; peasant                              | 7  |
| beggar; honest;<br>comfort (n)                    | 6  |
| waiter; sincere; black;<br>man; employer          | 5  |
| worker; submission;<br>slavery; noble;<br>cruelty | 4  |
| clean (adj)                                       | 3  |
| cunning; clever;<br>oppressed; generous           | 2  |
| Id                                                | 17 |

Ship

|                                                            |     |
|------------------------------------------------------------|-----|
| sea                                                        | 135 |
| travel (n); boat                                           | 30  |
| conveyance (conveying)                                     | 15  |
| water; transport (U);<br>space                             | 10  |
| pilgrimage; port                                           | 8   |
| ocean; moon                                                | 6   |
| goods; aeroplane;<br>captain                               | 5   |
| launch (passenger-<br>carrying boat); guide<br>(n); afloat | 4   |

Ship continued

|                                                                                           |    |
|-------------------------------------------------------------------------------------------|----|
| huge; submarine;<br>fish (n); visit (n);<br>company                                       | 2  |
| Id                                                                                        | 65 |
| <u>Shirt</u>                                                                              |    |
| wear (n, wearing or<br>being worn)                                                        | 57 |
| trousers                                                                                  | 55 |
| blouse                                                                                    | 32 |
| clothing (collective)                                                                     | 29 |
| suit; white                                                                               | 25 |
| wear (v)                                                                                  | 19 |
| material; tie (necktie)                                                                   | 12 |
| 'Galabia' /gallabijah/<br>(the popular piece of<br>clothing mainly in the<br>countryside) | 10 |
| jacket                                                                                    | 9  |
| dress (n); pyjama;<br>school                                                              | 8  |
| pullover; vest (n, under-<br>garment)                                                     | 5  |
| tailor; buttons; thread;<br>red; nylon                                                    | 4  |
| skirt; summer                                                                             | 3  |
| brother; socks; clean;<br>pocket; youth; pro-<br>tection; garment; silk                   | 2  |
| Id                                                                                        | 23 |



Short

|                                            |     |
|--------------------------------------------|-----|
| long                                       | 210 |
| upright (n)                                | 22  |
| midget                                     | 20  |
| small; grow; man                           | 15  |
| cunning (n)                                | 12  |
| hair                                       | 11  |
| shortness                                  | 10  |
| child                                      | 9   |
| fox; trousers                              | 7   |
| story; complex (n);<br>neck; fashion; life | 4   |
| Id                                         | 15  |

To shut

|                                                                                |     |
|--------------------------------------------------------------------------------|-----|
| open (v)                                                                       | 125 |
| door                                                                           | 91  |
| close                                                                          | 31  |
| bad omen; end (n)                                                              | 7   |
| block (v)                                                                      | 6   |
| handle (n); freedom                                                            | 5   |
| imprison; home; bath-<br>room; television;<br>window; rest (v);<br>despair (n) | 4   |
| waiting; room;<br>obstacles; wardrobe                                          | 3   |
| Id                                                                             | 55  |

Sick

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| pain                                                                     | 44 |
| hospital                                                                 | 40 |
| tired                                                                    | 23 |
| cure (n)                                                                 | 22 |
| weak; illness                                                            | 16 |
| physician; health                                                        | 14 |
| medicine (substance);<br>agonized                                        | 11 |
| tiredness; death;<br>treat (v); torture (U);<br>fit (n); test (n)        | 7  |
| heart; nurse; comfor-<br>table                                           | 5  |
| exhausted; exhaustion                                                    | 4  |
| physical; mental;<br>poor (deserving help<br>or sympathy); lazy;<br>very | 3  |
| Id                                                                       | 48 |

Sincere

|                         |    |
|-------------------------|----|
| friend                  | 76 |
| honest                  | 71 |
| faithful                | 54 |
| work (n); love (n); dog | 14 |
| loving (adj)            | 12 |
| betrayed; heart         | 11 |
| loved (adj)             | 10 |
| faithfulness            | 9  |

Sincere continued

the faithful (religious);  
very 6

man; bad; friendship;  
hard-working;  
respect (n) 4

Id 45

Sister

brother 150

friend (feminine) 30

kindness 25

beloved; kind; love (n) 20

tenderness 15

mother; tender; nice 10

girl; cooperation;  
family 8

tie (n); friendship;  
amity; hope; help(n) 4

secrets; giving; boy;  
father 2

Id 24

Skirt

blouse 77

clothing (U) 49

girl 41

(une) jupe (French word  
for 'skirt' was only  
given by girls) 25

Skirt continued

dress (n); put on 14

trousers; long 12

shirt; fashion; woman 9

pretty; new; chic (adj);  
red (adj) 7

short; shoes; tight;  
pyjama; black 6

coat; loose; cloth (U);  
wool 4

Id 37

Sky

clear (adj) 110

blue (adj) 60

earth 40

Allah 30

rain (n) 20

stars 15

blue (n); clouds; rainy 10

space 8

sun 5

wonders; moon 4

thunder; vacuum; sunset;  
high; light (n); sea;  
dark (adj); goodness;  
winter 2

Id 24

To sleep

|                                                                          |    |
|--------------------------------------------------------------------------|----|
| wake (v)                                                                 | 70 |
| bed                                                                      | 65 |
| rest (v)                                                                 | 60 |
| rest (n)                                                                 | 30 |
| night (U)                                                                | 20 |
| dream (v)                                                                | 15 |
| quiet (n); sleep (n);<br>dream (n); lie (n)                              | 10 |
| health; die; child                                                       | 5  |
| tired; exhausted                                                         | 4  |
| live; room; home;<br>winter; warm (v);<br>early; travel (n);<br>play (v) | 2  |
| Id                                                                       | 41 |

To smoke

|                                                                                               |     |
|-----------------------------------------------------------------------------------------------|-----|
| cigarette                                                                                     | 125 |
| harmful; 'drink' (v)<br>(In Arabic we say to<br>drink a cigarette as<br>well as to smoke it.) | 35  |
| illness; weakness                                                                             | 8   |
| tea; cigar; pipe<br>(tobacco); lighter                                                        | 7   |
| loathing; amusement;<br>problem                                                               | 5   |
| packet (in Arabic we say<br>a box of cigarettes);<br>enjoyment; Hashish;<br>health; matches   | 4   |

To smoke continued

|                                                                                                          |    |
|----------------------------------------------------------------------------------------------------------|----|
| holder (cigarette); woman;<br>beer; disease;<br>Cleopatra (an Egyptian<br>trade mark of cigar-<br>ettes) | 3  |
| Id                                                                                                       | 38 |
| <u>Society</u>                                                                                           |    |
| family                                                                                                   | 70 |
| people                                                                                                   | 30 |
| community; individual;<br>advanced                                                                       | 15 |
| cooperation;<br>backward (adj);<br>failing; the poor                                                     | 14 |
| united; developing                                                                                       | 10 |
| cooperative (adj);<br>ideal (n)                                                                          | 8  |
| neighbours; nation;<br>state (political);<br>economic; classes<br>(social)                               | 6  |
| democracy; failure;<br>school; progress (n);<br>youth                                                    | 5  |
| order (n); civilized;<br>traditions                                                                      | 4  |
| unity; happiness; sit;<br>committee; peace;<br>village; marriage                                         | 2  |
| Id                                                                                                       | 66 |

| <u>Son</u>                                                                                                                       |    | <u>Space</u> continued                      |    |
|----------------------------------------------------------------------------------------------------------------------------------|----|---------------------------------------------|----|
| daughter; father                                                                                                                 | 85 | imagination; vacuum                         | 2  |
| brother; obedient                                                                                                                | 25 | Id                                          | 5  |
| girl                                                                                                                             | 15 |                                             |    |
| kindness                                                                                                                         | 14 | <u>Spring</u>                               |    |
| heart; family                                                                                                                    | 10 | flowers                                     | 82 |
| love                                                                                                                             | 9  | autumn                                      | 60 |
| boy                                                                                                                              | 8  | beautiful                                   | 25 |
| sister                                                                                                                           | 7  | (of) life                                   | 22 |
| friend                                                                                                                           | 6  | roses                                       | 18 |
| youth; mother; beloved;<br>uncle; soul; kind;<br>good                                                                            | 4  | in blossom                                  | 17 |
| dear; marriage;<br>obedience; motherhood;<br>respect (n); respon-<br>sibilities; relative;<br>sentiment; man;<br>polite; student | 2  | summer; winter                              | 15 |
| Id                                                                                                                               | 31 | youth                                       | 12 |
|                                                                                                                                  |    | merry (n)                                   | 10 |
|                                                                                                                                  |    | season; life; love (n)                      | 9  |
|                                                                                                                                  |    | green (adj)                                 | 8  |
|                                                                                                                                  |    | ripen; greenness                            | 7  |
| <u>Space</u>                                                                                                                     |    | beauty; breeze                              | 6  |
| sky                                                                                                                              | 70 | nature; mild; atmosphere;<br>romantic       | 5  |
| air                                                                                                                              | 60 | blossom (n); smile (n);<br>pleasant; quiet; |    |
| universe                                                                                                                         | 58 | sparrows; trees                             | 4  |
| earth                                                                                                                            | 52 | Id                                          | 14 |
| Allah                                                                                                                            | 33 |                                             |    |
| moon                                                                                                                             | 30 | <u>Station</u>                              |    |
| sun; night; stars                                                                                                                | 25 | train (n)                                   | 85 |
| planet; rocket                                                                                                                   | 21 | bus                                         | 65 |
| ship                                                                                                                             | 18 |                                             |    |

Station continued

|                                                                                                       |    |
|-------------------------------------------------------------------------------------------------------|----|
| travel (n); waiting;<br>stop (n)                                                                      | 21 |
| metro                                                                                                 | 15 |
| arrival                                                                                               | 14 |
| tram; broadcast (n);<br>transports; passengers                                                        | 9  |
| traveller                                                                                             | 8  |
| seeing-off; crowd (n)                                                                                 | 7  |
| electricity; petrol;<br>airport; carriage;<br>riding; conveyance                                      | 4  |
| big; school; nice;<br>stop (v); Egypt (the<br>name of the main train<br>station in Cairo);<br>missile | 2  |
| Id                                                                                                    | 31 |

Story

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| novel (n)                                                                       | 50 |
| book                                                                            | 37 |
| nice                                                                            | 21 |
| tale                                                                            | 22 |
| reading                                                                         | 20 |
| interesting                                                                     | 17 |
| culture; amusement;<br>short                                                    | 15 |
| great; enjoyment                                                                | 8  |
| good; writer                                                                    | 7  |
| read; reader; dialogue;<br>hobby; imagination;<br>literature; conver-<br>sation | 5  |

Story continued

|                                                                                                    |    |
|----------------------------------------------------------------------------------------------------|----|
| criticism; play (n);<br>detective; under-<br>standing; study (n);<br>leisure                       | 4  |
| riddle; knowledge;<br>love (n); music                                                              | 3  |
| document; life; film (n);<br>exciting; school;<br>magazine; theme;<br>adventures; library;<br>Nile | 2  |
| Id                                                                                                 | 24 |

Street

|                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| alley                                                                                  | 52 |
| road                                                                                   | 35 |
| clean (adj); noisy                                                                     | 23 |
| cars                                                                                   | 17 |
| buses; noise; narrow                                                                   | 14 |
| crowds; houses                                                                         | 12 |
| wide; square                                                                           | 11 |
| transports                                                                             | 9  |
| walking; people; tram;<br>Mohamad Ali (the name<br>of a famous street in<br>old Cairo) | 7  |
| asphalted; borough; loss                                                               | 6  |
| seller                                                                                 | 5  |
| dark; Press (the name of<br>a street); platform                                        | 4  |
| Id                                                                                     | 45 |

Strong

|                                                     |     |
|-----------------------------------------------------|-----|
| weak                                                | 137 |
| brave                                               | 35  |
| lion                                                | 17  |
| athlete; courage                                    | 12  |
| Allah (the name of God<br>among Moslems)            | 11  |
| believer (religious);<br>body; strength;<br>muscles | 10  |
| soldier; trunk (body);<br>great; confidence         | 9   |
| man                                                 | 8   |
| very; exciting;<br>wrestling; sport (U);<br>stout   | 7   |

|                    |    |
|--------------------|----|
| beast; active; boy | 4  |
| Id                 | 29 |

To succeed

|                                    |    |
|------------------------------------|----|
| fail                               | 94 |
| examination; hard-<br>working      | 29 |
| joy                                | 28 |
| study (v)                          | 21 |
| win (v)                            | 18 |
| study (n); future;<br>congratulate | 12 |
| student                            | 11 |
| struggle (v); life;<br>Oh Allah!   | 9  |

To succeed continued

|                                                                                       |    |
|---------------------------------------------------------------------------------------|----|
| work (v); rejoice;<br>surpass; industry                                               | 7  |
| school; progress (v);<br>to be bright (intel-<br>lectually); gain (v);<br>certificate | 6  |
| profit (v); play (v);<br>effort; congratu-<br>lations                                 | 5  |
| questions; to make<br>happy; distinction;<br>to make an effort;<br>superiority        | 4  |
| Id                                                                                    | 24 |

Suit

|                                                                                                                                                           |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| clothes                                                                                                                                                   | 72 |
| shirt                                                                                                                                                     | 44 |
| nice                                                                                                                                                      | 20 |
| chic (adj)                                                                                                                                                | 14 |
| expensive; military<br>(i.e. military uniform)                                                                                                            | 11 |
| party (gathering of<br>persons for pleasure);<br>new; woollen; black                                                                                      | 10 |
| trousers; cloth (U);<br>blouse; dress (n);<br>pyjama; cleanliness;<br>jacket                                                                              | 8  |
| warm; tie (necktie)                                                                                                                                       | 7  |
| loose; tight; button;<br>occasion; uniform;<br>look (appearance); long;<br>excellent; smartness;<br>protection; practical;<br>picnic; shoes;<br>reverence | 4  |

Suit continued

meeting; tailor;  
money; brown 2

Id 29

Sun

moon 81

light (U) 42

heat (n) 28

bright (adj); day  
(time between sunrise  
and sunset) 20

shining 18

warmth 16

morning 14

sunset (n); planet;  
nice; blessing 6

lighten (make light or  
bright); life 4

stars; earth (planet  
on which we live);  
summer; cold (n);  
nature; useful; rays;  
halo; energy; hope  
(n); clear (adj) 2

Id 48

Sweet

beautiful 66

delicious; bitter 51

taste (n) 23

sugar 21

Sweet continued

fruits 20

bad 17

sweets; food 15

beauty 12

honey 11

chocolate; love (n);  
good 10

sour; sugary; mango 7

happiness; moon 5

ice-cream; sharp (taste) 4

music; juice 2

Id 34

To swim

sea 73

'yasbah /jasbah/ (In  
the Arabic version of  
the test the stimulus  
word 'swim' was trans-  
lated into /jaʃu:m/.  
'Yasbah' is the synonym  
in classical Arabic.);  
drown 42

swimming; sport 20

dive (v) 15

race (n) 8

Alexandria (the largest  
port in Egypt); water 6

swimmer 5

swimming-pool; beach;  
wrestle 4

To swim continued

activity; sail (v);  
play (v); run (v) 3

championship; art;  
hobby; skill;  
bathe; put off  
(remove) 2

Id 24

Taxi

transport (n) 65

car 45

difficult (to find) 27

crisis 21

bus 19

does not exist 18

crowd (n) 15

getting in; hardships;  
driver 12

problem; speed (n) 10

city centre 9

rare; agony 8

hire (n) 7

take; black; street 5

tram; passengers;  
meter; where?;  
route; stop (v) 4

tiredness; square;  
empty; luxury;  
waiting; yellow 3

train; turn (n);  
impossible (to find) 2

Id 27

Tea

coffee (In Egypt  
'ground' coffee is  
the most popular  
kind. Instant  
coffee has recently  
been known.) 65

drink (n) 55

black (adj); temperament 21

Upper-Egyptian (the kind  
of tea made by the  
Upper Egyptians.  
Usually they put plenty  
of tea on water and  
then boil it until the  
drink is very dark and  
bitter.) 19

study 16

drink (v); nice; sugar;  
Ceylon 14

milk 10

bitter; green (tea) 6

hot; evening 5

glass; crisis; morning;  
necessary; headache;  
stimulant 4

coffee powder; gateaux;  
imported; nerves 2

Id 50

Teacher

school 59

breeder 39

father 34

prophet (religious) 25



Teacher continued

|                                                                                     |    |
|-------------------------------------------------------------------------------------|----|
| student                                                                             | 24 |
| professor                                                                           | 19 |
| instruction                                                                         | 18 |
| headmaster                                                                          | 17 |
| respect (n); educator                                                               | 12 |
| lesson; explain;<br>respect (v)                                                     | 10 |
| Arabic (lesson);<br>doctor                                                          | 6  |
| old- unsuccessful;<br>excellent; class(room);<br>science; engineer                  | 4  |
| college; model; period<br>(of a lesson); hated                                      | 3  |
| stupid; food; private-<br>lesson; energy;<br>notebook; mathe-<br>matics; blackboard | 2  |
| Id                                                                                  | 38 |

Television

|                                           |    |
|-------------------------------------------|----|
| entertainment                             | 41 |
| watching                                  | 30 |
| film                                      | 29 |
| radio                                     | 24 |
| colour                                    | 21 |
| programme                                 | 20 |
| match (sport); play<br>(drama); telephone | 12 |
| interesting; silly                        | 10 |
| picture (n); drama                        | 8  |

Television continued

|                                                                                                                                                                                                 |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| watch (v); wasting time                                                                                                                                                                         | 7  |
| screen (n); transmission;<br>commercials                                                                                                                                                        | 6  |
| cinema; information (U)                                                                                                                                                                         | 5  |
| news                                                                                                                                                                                            | 4  |
| amusement; enjoyment;<br>information; nice;<br>channel                                                                                                                                          | 3  |
| culture; important;<br>luxury; ball; viewer;<br>accidents; speak;<br>set (n); out of order;<br>communication; mirror;<br>series; corrupt (adj);<br>family; woman-broad-<br>caster; meeting; old | 2  |
| Id                                                                                                                                                                                              | 23 |

Tent

|                                     |    |
|-------------------------------------|----|
| camp (n)                            | 63 |
| journey                             | 51 |
| desert (Sahara)                     | 44 |
| house                               | 34 |
| scouts                              | 25 |
| Arabs                               | 19 |
| Bedouins (usually live<br>in tents) | 16 |
| shelter (n)                         | 15 |
| hut                                 | 14 |
| cloth (U)                           | 12 |
| big                                 | 6  |

Tent continued

|                                                                 |    |
|-----------------------------------------------------------------|----|
| hiding-place; refugee                                           | 4  |
| circus; small; peg;<br>persons; sit; village;<br>nice; soldiers | 3  |
| cabin; large; camel;<br>villa                                   | 2  |
| Id                                                              | 42 |

To thank continued

|                                                                                                    |    |
|----------------------------------------------------------------------------------------------------|----|
| serve; present (v); to<br>be sorry; anger (v)                                                      | 3  |
| insult (v); pray (v);<br>kiss (v); confess;<br>sincere; appreciate;<br>to ask for forgive-<br>ness | 2  |
| Id                                                                                                 | 24 |

To thank

|                                                                      |    |
|----------------------------------------------------------------------|----|
| Allah                                                                | 50 |
| work (n)                                                             | 25 |
| 'Yahmed' /Jahmid/ (a<br>synonym of thank used<br>only with 'Allah'.) | 22 |
| polite; respect (v);<br>praise (v); eulogize                         | 20 |
| prefer; welcome (v)                                                  | 17 |
| greet                                                                | 15 |
| duty; thanking                                                       | 10 |
| respect (n); dispraise                                               | 9  |
| teacher                                                              | 8  |
| gratefulness; shake<br>hands (v);<br>supplicate                      | 7  |
| manners; love (v);<br>congratulate                                   | 6  |
| wish (v)                                                             | 5  |
| give; smile (v); award;<br>deny; present (n);<br>compliment (v)      | 4  |

Time

|                                                                              |    |
|------------------------------------------------------------------------------|----|
| time (n) (all the days<br>of the past, present<br>and future)                | 75 |
| gold                                                                         | 55 |
| hour                                                                         | 32 |
| leisure                                                                      | 18 |
| precious                                                                     | 15 |
| night (U)                                                                    | 8  |
| sleep (n); study (n)                                                         | 7  |
| lost (adj); while;<br>sword; month                                           | 6  |
| evening; day (U);<br>suitable; press (v);<br>appointment; short<br>(adj)     | 5  |
| interesting; long; enjoy-<br>ment; morning; love(n);<br>prayers; run(v); age | 4  |
| work (n); late; impor-<br>tant; wonderful;<br>death; examination;<br>narrow  | 4  |
| rest (n); important;<br>happy                                                | 2  |
| Id                                                                           | 30 |

Tomato

|                                                                                                                                               |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----|
| red (adj)                                                                                                                                     | 91 |
| eating; vegetables                                                                                                                            | 31 |
| tomato pure                                                                                                                                   | 23 |
| salad                                                                                                                                         | 18 |
| cooking                                                                                                                                       | 17 |
| potatoes                                                                                                                                      | 15 |
| food; onion                                                                                                                                   | 11 |
| cucumbers                                                                                                                                     | 8  |
| delicious; mad (it is<br>customary to call<br>'tomato' mad because<br>its price fluctuates<br>from around 3p a kilo<br>to around 45p a kilo.) | 7  |
| plant (n); juice                                                                                                                              | 6  |
| market                                                                                                                                        | 5  |
| blood                                                                                                                                         | 4  |
| vitamins; meat;<br>expensive                                                                                                                  | 3  |
| apple; bread; meal;<br>fruits; green beans;<br>egg-plant; vegetable<br>marrow; peasant; beans                                                 | 2  |
| Id                                                                                                                                            | 8  |

Tongue

|            |     |
|------------|-----|
| speech     | 120 |
| sour (adj) | 30  |
| mouth      | 28  |
| long       | 24  |
| nice       | 17  |

Tongue continued

|                                                                                                            |    |
|------------------------------------------------------------------------------------------------------------|----|
| taste (n); speak                                                                                           | 15 |
| words; truth; right (n)                                                                                    | 8  |
| language                                                                                                   | 6  |
| hand; liar                                                                                                 | 5  |
| expression; literature;<br>pronunciation;<br>pronounce; say (n);<br>swearing (using pro-<br>fane language) | 4  |
| teeth; movement; silence                                                                                   | 3  |
| goodness; speaker; dog;<br>work (v); dumb; say<br>(v); organ; nose;<br>heart; ear                          | 2  |
| Id                                                                                                         | 29 |
| <u>Tourist</u>                                                                                             |    |
| visitor                                                                                                    | 55 |
| foreigner                                                                                                  | 41 |
| stranger                                                                                                   | 26 |
| wander (v)                                                                                                 | 21 |
| visit (v)                                                                                                  | 20 |
| wanderer                                                                                                   | 18 |
| pyramids; monuments;<br>Arabs; Europeans                                                                   | 17 |
| onlookers; Europe;<br>summer; tourism                                                                      | 12 |
| guest                                                                                                      | 6  |
| picnic; leisure; seller                                                                                    | 4  |
| pride; nice; knowledge                                                                                     | 2  |
| Id                                                                                                         | 45 |

Trade

|                                                                   |    |
|-------------------------------------------------------------------|----|
| profit (n)                                                        | 57 |
| profitable                                                        | 47 |
| buying and selling                                                | 28 |
| gaining                                                           | 24 |
| selling                                                           | 23 |
| merchant                                                          | 17 |
| 'Halal /hala:l/<br>(non-taboo);<br>exchanging                     | 15 |
| market; money; economy                                            | 12 |
| agriculture                                                       | 11 |
| industry                                                          | 10 |
| buying                                                            | 8  |
| export (n)                                                        | 7  |
| work (n); goods                                                   | 6  |
| loss; intelligence;<br>cheating; grocer;<br>articles; bargain (n) | 4  |
| import (n); honesty                                               | 3  |
| cars; art; occupation;<br>cooperative; ships                      | 2  |
| Id                                                                | 26 |

Train

|            |     |
|------------|-----|
| travel (n) | 106 |
| fast (adj) | 36  |
| speed (n)  | 31  |
| bus; car   | 15  |

Train continued

|                                                                 |    |
|-----------------------------------------------------------------|----|
| travel (v); passengers                                          | 10 |
| carriage; taxi; transport                                       | 8  |
| station; track (rail)                                           | 6  |
| Alexandria; tram;<br>arrival                                    | 4  |
| morning; visit (v);<br>old; crowd (n); long;<br>modern          | 3  |
| Id                                                              | 34 |
| <u>To travel</u>                                                |    |
| train                                                           | 59 |
| depart                                                          | 52 |
| return (v); leave (v)                                           | 27 |
| imigrate                                                        | 24 |
| aeroplane                                                       | 19 |
| far; see off (v)                                                | 17 |
| go (v)                                                          | 12 |
| disunion; ride (v)                                              | 11 |
| ship                                                            | 8  |
| seeing off; France;<br>move (v)                                 | 7  |
| journey; London; stay<br>on; abroad                             | 6  |
| bags; visit (v);<br>future; walk (v)                            | 5  |
| departure; pain; tension;<br>weeping; airport; hire;<br>go away | 4  |
| die; wander; hardship                                           | 2  |
| Id                                                              | 4  |

Trousers

|                                                             |    |
|-------------------------------------------------------------|----|
| shirt                                                       | 89 |
| wear (wearing or being worn)                                | 62 |
| cloth (U)                                                   | 11 |
| jacket; suit                                                | 10 |
| jeans; pyjama                                               | 9  |
| bouse; dress (n)                                            | 8  |
| leg; put on; pullover; black; cowboy                        | 6  |
| long; loose; blue; zip (n)                                  | 4  |
| swimming costume; coloured; shorts                          | 3  |
| new; foreign; short; winter; smartness; thread; chich (adj) | 2  |
| Id                                                          | 54 |

Turnip

|                     |     |
|---------------------|-----|
| pickle (n)          | 131 |
| food                | 21  |
| carrot              | 18  |
| pickle (v); popular | 17  |
| plant (n)           | 16  |
| onion; beetroot     | 14  |
| sight               | 12  |
| delicious           | 11  |
| nice                | 9   |

Turnip continued

|                                                     |    |
|-----------------------------------------------------|----|
| salted; minerals; salda; vegetable; lemon; salt (n) | 7  |
| grow; cabbage                                       | 6  |
| appetite; winter; white; chilli                     | 4  |
| beans; tomato                                       | 2  |
| Id                                                  | 27 |

Umbrella

|                                                   |     |
|---------------------------------------------------|-----|
| sun                                               | 115 |
| rain                                              | 57  |
| summer                                            | 35  |
| protector; summer resort; protect                 | 12  |
| protection                                        | 10  |
| winter; shed (v); plage (French word for 'beach') | 7   |

|                        |    |
|------------------------|----|
| soldier                | 6  |
| big                    | 4  |
| bird; sea; plane; tent | 2  |
| Id                     | 65 |

Uncle (father's brother) / am/

uncle (mother's brother) /xal/ 146

|          |    |
|----------|----|
| father   | 86 |
| relative | 26 |

| <u>Uncle</u> continued                                                           |    | <u>University</u>                                                                              |    |
|----------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------------------|----|
| brother                                                                          | 22 | instruction; college                                                                           | 45 |
| good                                                                             | 9  | school                                                                                         | 37 |
| love (n)                                                                         | 7  | science                                                                                        | 33 |
| aunt (father's sister);<br>kind; uncle (the<br>English word)                     | 6  | student; future                                                                                | 15 |
| son; affection;<br>cousin                                                        | 4  | culture; coeducation                                                                           | 14 |
| tender; man; sincere;<br>engineer; generous                                      | 2  | Cairo; youth                                                                                   | 12 |
| Id                                                                               | 44 | Al-Azhar; hope (n)                                                                             | 10 |
|                                                                                  |    | doctor; intellectual<br>maturity                                                               | 8  |
|                                                                                  |    | lectures; stage;<br>engineering; demon-<br>strator                                             | 5  |
| <u>Unity</u>                                                                     |    | teach; medicine;<br>Alexandria; big;<br>study (n)                                              | 4  |
| union                                                                            | 52 | education; admission;<br>cultured; Arab (Arab<br>University means Arab<br>League); certificate | 3  |
| strength                                                                         | 45 | Id                                                                                             | 28 |
| Arab (adj)                                                                       | 44 |                                                                                                |    |
| separation; nationalism                                                          | 24 |                                                                                                |    |
| army                                                                             | 18 |                                                                                                |    |
| Arabs                                                                            | 15 |                                                                                                |    |
| coherence; cooperation                                                           | 12 | <u>Vegetable</u>                                                                               |    |
| cohesion; society                                                                | 10 | fruit                                                                                          | 70 |
| order (n)                                                                        | 9  | food; salad                                                                                    | 20 |
| community                                                                        | 6  | fresh                                                                                          | 31 |
| group (n)                                                                        | 5  | eating                                                                                         | 40 |
| agreement; security;<br>integrated                                               | 4  | potatoes                                                                                       | 12 |
| evacuation; peace;<br>dream (n); countries;<br>blocks; freedom;<br>doubt (n); No | 2  | market; 'Meloukhiah';<br>tomato                                                                | 11 |
| Id                                                                               | 64 | cooking; spinach                                                                               | 10 |
|                                                                                  |    | cauliflower; peas;<br>green beans                                                              | 9  |

Vegetable continued

|                                                       |    |
|-------------------------------------------------------|----|
| peasant; vegetable<br>marrow; green                   | 8  |
| protein                                               | 7  |
| greengrocer; farmer                                   | 6  |
| useful; clean (adj);<br>plant (n)                     | 5  |
| field; carrots;<br>lettuce; vitamins;<br>buying; meat | 4  |
| delicious; important                                  | 2  |
| Id                                                    | 24 |

Village

|                                           |    |
|-------------------------------------------|----|
| city                                      | 59 |
| peasant                                   | 45 |
| countryside                               | 41 |
| small (small village<br>= hamlet)         | 39 |
| agriculture                               | 23 |
| cooperation;<br>backwardness              | 17 |
| farmer                                    | 14 |
| quiet (n)                                 | 11 |
| model; modern                             | 9  |
| factory; crops;<br>Egyptian; big; nature  | 7  |
| centre; underdevelopment                  | 6  |
| school; cow; beautiful;<br>donkey; plough | 4  |
| buffalo; primitiveness                    | 2  |
| Id                                        | 24 |

To visit

|                                  |    |
|----------------------------------|----|
| ill (n)                          | 33 |
| friend                           | 23 |
| go                               | 22 |
| guest; relatives                 | 14 |
| tourist; visit (n)               | 10 |
| hospitality; go out;<br>hospital | 9  |
| people; Cairo; amity             | 8  |
| see; uncle (father's<br>brother) | 6  |
| invite; home                     | 5  |

|                                                                                               |    |
|-----------------------------------------------------------------------------------------------|----|
| journey; salute (n);<br>leave; Aswan; pyramids;<br>tombs; come; knowledge;<br>return; visitor | 4  |
| exhibition; holiday                                                                           | 3  |
| bus; introduce (make<br>persons known by names)                                               | 2  |
| Id                                                                                            | 25 |

War

|                                                  |     |
|--------------------------------------------------|-----|
| peace                                            | 112 |
| destruction                                      | 51  |
| 6th October (1973 war)                           | 19  |
| battle; weapon                                   | 17  |
| blood; victory                                   | 11  |
| aggression; world (adj);<br>fight (v); fight (n) | 10  |
| politics; Israel;<br>martyrs; enemy              | 9   |

War continued

|                                               |    |
|-----------------------------------------------|----|
| defence; defeat (n)                           | 8  |
| soldier; death; back-wardness; reconciliation | 7  |
| wreckage                                      | 5  |
| destructive                                   | 4  |
| Id                                            | 28 |

To wash

|                                     |    |
|-------------------------------------|----|
| clean (v)                           | 58 |
| cleanliness                         | 48 |
| clothing; washer (human or machine) | 41 |
| plates                              | 18 |
| soap; mother; clean (adj)           | 15 |
| wash (n); dry (v)                   | 12 |
| spread (v)                          | 10 |
| iron (v)                            | 7  |
| Savo (washing powder)               | 6  |
| wipe; work (v)                      | 5  |
| hand; dirt                          | 4  |
| bachelor; face (n); work (n)        | 2  |
| Id                                  | 55 |

Washing machine

|                                                        |    |
|--------------------------------------------------------|----|
| wash (n) (clothing, etc. to be washed or being washed) | 66 |
| comfort (n); clothes                                   | 37 |
| refrigerator                                           | 31 |
| cleanliness                                            | 25 |
| wash (v); help (n)                                     | 17 |
| speed (n); clean (adj)                                 | 14 |
| clean (v); comfort (v)                                 | 12 |
| cleaning; useful                                       | 11 |
| facilitation; progress(n)                              | 10 |
| gas cooker                                             | 9  |
| science; comfortable; technology; soap; fatigue        | 5  |
| machine; wash-cloth-basin                              | 4  |
| development; dirt; motor; effort                       | 2  |
| Id                                                     | 20 |

Weak

|                                         |     |
|-----------------------------------------|-----|
| strong                                  | 180 |
| personality                             | 19  |
| sick                                    | 10  |
| feebleness; illness                     | 8   |
| body; constitution (physical structure) | 7   |



Weak continued

|                                                       |    |
|-------------------------------------------------------|----|
| disability; aged;<br>coward                           | 6  |
| thin; will (n);<br>vanquished; opinion;<br>passive    | 5  |
| man; brave; calm (adj);<br>tensed; beat (v);<br>devil | 4  |
| slim; poor; failure                                   | 3  |
| boy; stupid; very;<br>animal; mouse;<br>exhaustion    | 2  |
| Id                                                    | 45 |

Wealth

|                                   |    |
|-----------------------------------|----|
| money                             | 93 |
| richness                          | 45 |
| health                            | 22 |
| enormous; large                   | 20 |
| manners                           | 18 |
| sum (n); cotton                   | 12 |
| profit (n)                        | 10 |
| poverty                           | 8  |
| bankruptcy; the rich              | 7  |
| petrol (oil); loss;<br>treasure   | 6  |
| millionaire; science;<br>the poor | 5  |
| hope (n); inheritance;<br>land    | 4  |
| happiness; possessions            | 3  |
| social; useful                    | 2  |
| Id                                | 45 |

Weapon

|                                                                                      |     |
|--------------------------------------------------------------------------------------|-----|
| war                                                                                  | 140 |
| soldier                                                                              | 17  |
| defence                                                                              | 15  |
| training; destruction                                                                | 8   |
| strength; death; strong;<br>fight (v); gun (n)                                       | 7   |
| white (adj); army;<br>struggle (n); infantry;<br>rifle; battle (n)                   | 6   |
| oil; pistol; defender;<br>horsemanship; atomic;<br>sword; fighter                    | 5   |
| penknife; defend; air<br>force; victory; danger;<br>ready; protection                | 4   |
| science; modern; enemy;<br>embargo; evil;<br>destructive; arrow;<br>courage; foreign | 3   |
| blood; peace; civil; air;<br>great; tank; killing;<br>future                         | 2   |
| Id                                                                                   | 25  |
| <u>To wear</u>                                                                       |     |
| put off                                                                              | 82  |
| put on                                                                               | 52  |
| clothing (collective)                                                                | 27  |
| shirt                                                                                | 25  |
| suit; trousers                                                                       | 18  |
| go out; going for a walk                                                             | 14  |
| dress (n); cover (v)                                                                 | 12  |
| chic (n)                                                                             | 10  |

To wear continued

jacket; glasses; warmth;  
new; pyjama; warm(v) 4

cotton; shoes; picnic;  
go; dress (put on  
clothes); ring  
(engagement); room 2

Id 24

To welcome

guest 84

receive; to be hospi-  
table to (somebody) 31

generosity; thank 19

visit (n); shake  
hands (v) 14

visit (v); dismiss;  
kinsfolk 12

honour (v); beloved 10

to be happy; love (v);  
happiness 8

welcome (n); relatives;  
congratulate 7

see off (v); host (v) 6

introduce (somebody to  
another); Egypt 5

complement (v);  
appreciate; respect;  
duty; prefer; insult  
(v); visitor 4

Id 26

West

east 190

north 36

Europe 25

sunset; progress (n) 10

America 8

night (U) 6

sun; Morroco (Morroco  
and expatriation share  
acoustic similarity  
with west in Arabic);  
beauty 5

Alexandria; London 4

Asia; winter; expatri-  
ation (see above) 2

Id 51

Wheat

bread 90

nutrition 38

maize 30

eating 24

food 18

rice 16

field; barley; crops;  
cotton 8

plant (n); corn;  
harvest (n) 6

agriculture; grains 5

eat 4

Wheat continued

pastry; peasants; white;  
 necessary; beans  
 (horse); soil; house;  
 starch (n); black;  
 delicious; popular;  
 gold; yellow; flour;  
 tiny

2

Id

44

White

black

160

colour (n)

41

serenity

21

pearly (white)

18

heart (in Arabic it is  
 said: white-hearted,  
 i.e. heart free of  
 hate and malice)

16

red; purity

15

peace

14

Arabian-jasmine

9

clear (adj); green (n);  
 beautiful

6

light (n)

5

shirt; coloured; day(U)

4

snow; blue

2

Id

39

Wife

husband

66

sincere

48

Wife continued

sincerity; mother

31

faithful

19

long company

18

partner

17

faithfulness; family;  
 home; love (n)

10

offspring

9

responsibility

6

respectable; tie;  
 beloved; honour (n);  
 obedient; worker

5

beautiful; betrayer;  
 kind; future; good;  
 life; settlement;  
 young woman; sharing

4

divorcee; man; problems

3

Id

24

Wine

taboo

100

beer

31

whisky

25

drunkenness

23

intoxicant

18

intoxicate

17

drinking

14

harmful; grapes

11

Christian; cabaret;  
 women

8

Wine continued

|                                                    |    |
|----------------------------------------------------|----|
| riot; drunkard; bar;<br>enormity; tension;<br>loss | 7  |
| forgetting; hell                                   | 6  |
| casino; corruption                                 | 5  |
| disobedience; stupidity;<br>lust; worries          | 4  |
| Id                                                 | 10 |

Winter

|                                                             |     |
|-------------------------------------------------------------|-----|
| summer                                                      | 100 |
| cold (n)                                                    | 100 |
| rain (n)                                                    | 60  |
| cold (adj)                                                  | 20  |
| autumn                                                      | 8   |
| spring; warmth                                              | 6   |
| storm (n); night (U);<br>lightning (U); frost;<br>sun; snow | 5   |
| fear (n); sleep (n);<br>season                              | 4   |
| coat; wool                                                  | 3   |
| school; umbrella; nice;<br>motion; hot;<br>laziness         | 2   |
| Id                                                          | 20  |

Woman

|      |     |
|------|-----|
| man  | 110 |
| wife | 26  |

Woman continued

|                                   |    |
|-----------------------------------|----|
| beautiful                         | 22 |
| marriage                          | 19 |
| innocent                          | 15 |
| betrayal                          | 14 |
| eve                               | 11 |
| respect; mother; sincere          | 9  |
| femininity; elegance              | 8  |
| love (n); society                 | 7  |
| girl; working (adj)               | 6  |
| beauty; artist; old;<br>offspring | 4  |
| intelligent; talkative;<br>polite | 3  |
| sex; Egyptian;<br>neighbour; Miss | 2  |
| Id                                | 31 |

Wool

|                        |    |
|------------------------|----|
| warmth                 | 52 |
| cotton                 | 40 |
| winter; sheep          | 35 |
| knitting               | 20 |
| cattle; silk; spinning | 15 |
| pullover; heavy        | 14 |
| clothing; shirt; cold  | 12 |
| expensive              | 11 |
| warm                   | 10 |
| flax                   | 8  |

| <u>Wool</u> continued                                                              |    | <u>To write</u>                                                                              |     |
|------------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------|-----|
| cover (n); blanket;<br>English (adj)                                               | 7  | read                                                                                         | 145 |
| heat (n)                                                                           | 6  | letter                                                                                       | 42  |
| rough; carpet                                                                      | 3  | pen                                                                                          | 18  |
| cloth; coat; factories;<br>pyjama                                                  | 2  | compile; express (v)                                                                         | 12  |
| Id                                                                                 | 10 | story                                                                                        | 11  |
|                                                                                    |    | notebook                                                                                     | 10  |
|                                                                                    |    | register (v); thinker                                                                        | 9   |
| <u>Worker</u>                                                                      |    | learn; inform                                                                                | 7   |
| factory                                                                            | 55 | poet; do; understand;<br>study (v)                                                           | 6   |
| official (person<br>holding a government<br>position or engaged<br>in public work) | 40 | research (n); paper;<br>record (v)                                                           | 5   |
| manufacturer                                                                       | 35 | school; studying; send;<br>to be cultured; office<br>(desk); play (v);<br>plan (v); remember | 4   |
| work (n); industry                                                                 | 25 | work (v)                                                                                     | 2   |
| industrious; native;<br>production                                                 | 16 | Id                                                                                           | 23  |
| work (v)                                                                           | 15 |                                                                                              |     |
| assistant; engineer                                                                | 10 | <u>Year</u>                                                                                  |     |
| sincere; worker (femi-<br>nine)                                                    | 8  | age                                                                                          | 75  |
| manager; tire (v)                                                                  | 7  | month                                                                                        | 58  |
| poverty; striving;<br>government; telephone                                        | 6  | days                                                                                         | 52  |
| merchant; skilful;<br>Egypt                                                        | 5  | long                                                                                         | 31  |
| build; striver; help(v)                                                            | 4  | time (all days of the<br>past, present and<br>future)                                        | 19  |
| textile; driver                                                                    | 3  | happy; centuries;<br>several                                                                 | 14  |
| happy; farmer;<br>renaissance                                                      | 2  | future                                                                                       | 11  |
| Id                                                                                 | 20 | week; life                                                                                   | 10  |

Year continued

|                                                    |    |
|----------------------------------------------------|----|
| pass (v)                                           | 8  |
| coming (adj)                                       | 6  |
| experience (n); lost;<br>few; bitter; past;<br>war | 4  |
| Id                                                 | 34 |

Yellow

|                                                           |    |
|-----------------------------------------------------------|----|
| colour (n)                                                | 61 |
| red (n); orange (fruit<br>not colour)                     | 40 |
| green                                                     | 39 |
| jealousy                                                  | 35 |
| white (n); sands; sun                                     | 11 |
| illness; blue                                             | 9  |
| butter; purple; desert<br>(n); quiet (adj)                | 6  |
| roses; face (n); carrots                                  | 4  |
| paleness; hair; bright<br>(adj); mango; apricot;<br>lemon | 3  |
| pleasant; brown; black;<br>plums; flower; grapes          | 2  |
| Id                                                        | 43 |

Young

|       |     |
|-------|-----|
| old   | 180 |
| child | 60  |
| mind  | 10  |

Young continued

|                            |   |
|----------------------------|---|
| baby                       | 8 |
| weak                       | 7 |
| innocence; long            | 6 |
| short; age; body;<br>radio | 5 |
| beautiful; kind; liar      | 4 |

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| intelligent; happiness;<br>eat; tears; active;<br>old; angel; grow;<br>boy; pleasant | 2  |
| Id                                                                                   | 51 |

Youth

|                               |    |
|-------------------------------|----|
| vitality                      | 45 |
| old                           | 39 |
| future                        | 35 |
| today's                       | 25 |
| fun                           | 24 |
| merry (n)                     | 22 |
| life                          | 19 |
| strength                      | 17 |
| man; adolescence              | 15 |
| ambition; activity;<br>health | 12 |
| hope (n)                      | 11 |
| club                          | 10 |
| adults; mature (adj)          | 9  |
| corrupt (adj)                 | 8  |

Youth continued

|                                       |     |
|---------------------------------------|-----|
| marriage; happiness;<br>ageing        | 7   |
| glory                                 | 6   |
| innocence; beautiful;<br>recklessness | 5   |
| trivial                               | 4   |
| Id                                    | . 2 |

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